

NATIONAL AERONAUTICAL ESTABLISHMENT  
LIBRARY

C.P. No. 151  
(15.966)  
A.R.C. Technical Report



**MINISTRY OF SUPPLY**

AERONAUTICAL RESEARCH COUNCIL  
CURRENT PAPERS

**Tabulation of the Blasius Function  
with Blowing and Suction**

*By*

H. W. Emmons and D. C. Leigh

LONDON . HER MAJESTY'S STATIONERY OFFICE

1954

SEVEN SHILLINGS NET



Tabulation of the Blasius Function with Blowing and Suction.

By  
H. W. Emmons and D. C. Leigh.

Communicated by Prof. W. A. Mair.

5th June, 1953

The Blasius differential equation  $f''' + ff'' = 0$  for the velocity distribution in a boundary layer is too well known to warrant any derivation here. Most books on theoretical aerodynamics contain a derivation. In particular the reader is referred to "Modern Developments in Fluid Mechanics"<sup>1</sup>, Vol. 1., p. 116, or "Aerodynamic Theory"<sup>2</sup>, Vol. III, p. 80

The velocity components,  $u$ , along and,  $v$ , perpendicular to the surface are given in terms of  $f$  for an incompressible fluid by

$$\frac{u}{u_{\infty}} = \frac{1}{2} \frac{df}{d\eta} = \frac{1}{2} f' \quad \dots(1)$$

$$\frac{v}{u_{\infty}} = \frac{1}{2} (\eta f' - f) \frac{1}{Re^{\frac{1}{2}}} \quad \dots(2)$$

where  $u_{\infty}$  is the undisturbed velocity outside of the boundary layer, and

$$Re = \frac{u_{\infty} x}{\nu}$$

The co-ordinate  $\eta$  is related to the position,  $x$ , along and,  $y$ , perpendicular to the plate by the equation

$$\eta = \frac{1}{2} \left( \frac{u_{\infty}}{\nu} \right)^{\frac{1}{2}} \frac{y}{x^{\frac{1}{2}}} \quad \dots(3)$$

in the case of an incompressible fluid.

The case of a compressible fluid boundary layer can often be solved by the same Blasius equation by making the relatively mild assumption

$$\rho \mu = \text{constant} \quad \dots(4)$$

The/

The corresponding velocity components and co-ordinate are

$$\frac{u}{u_{\infty}} = \frac{1}{2}f' \quad \dots(5)$$

$$\frac{\rho v}{\rho_{\infty} v_{\infty}} = \frac{1}{2}(\eta f' - f) \frac{1}{Re^{\frac{1}{2}}} - \frac{f'}{2} \int_0^y \frac{\partial}{\partial x} \left( \frac{\rho}{\rho_{\infty}} \right) dy \quad \dots(6)$$

$$\eta = \frac{1}{2} \left( \frac{u_{\infty}}{v} \right)^{\frac{1}{2}} \frac{1}{x^{\frac{1}{2}}} \int_0^y \left( \frac{\rho}{\rho_{\infty}} \right) dy \quad \dots(7)$$

This can be considered to be the reduction of the compressible fluid boundary layer to the corresponding incompressible boundary layer if desired, but little is gained by so doing.

A long distance from the plate the velocity component along the plate becomes equal to the free stream velocity  $u(\infty) = u_{\infty}$ . Thus the boundary condition at  $\eta = \infty$  is

$$\frac{u(\infty)}{u_{\infty}} = \frac{1}{2}f'(\infty) = 1 \quad \text{at} \quad \eta = \infty \quad \dots(8)$$

For a stationary plate,  $u = 0$  at the plate and a second boundary condition is

$$f'(0) = 0 \quad \text{at} \quad \eta = 0 \quad \dots(9)$$

The only cases of moving plate ( $u(0) \neq 0$ ), reducible to the Blasius equation involve a plate velocity proportional to  $x^{-2}$  for which there are no practical applications known to the authors. Most such cases, should they arise, could be solved by use of a fictitious origin for  $\eta$ .  $f^*(0) = 0$  at  $\eta = 0$  is used throughout these tables.

For a non-porous plate the third boundary condition is  $v(0) = 0$  at  $\eta = 0$  or

$$f(0) = 0 \quad \text{at} \quad \eta = 0 \quad \dots(10)$$

In the case of a porous wall through which fluid is being blow or sucked, the normal velocity component  $v$  is not zero. Only in the case of  $v(0, x)$  proportional to  $x^{-2}$ , as required by equations (2) or (6), is the boundary layer problem reducible to that of Blasius equation. Such inverse half paver blowing or suction distribution is only conveniently attained if the normal surface velocity is controlled by the boundary layer itself through its mass and heat transfer properties.

It was in connection with the solution of a combustion problem that the present solutions were obtained.

The normal velocity at the plate can conceivably take any value between  $-\infty$  and  $+\infty$  by attaching the proper blowing or suction device to the plate. However, Lock's solution of a laminar jet mixing problem can be interpreted as showing that at a certain blowing velocity (corresponding to  $f(0) = -1.23849\dots$ ) the boundary layer is "blown away". Mathematically  $f(0)$  must be  $-1.23849\dots$  if  $f''(0) = 0$  and  $f'(\infty) = 2$ . In this case the differential equation gives  $f'(\eta) = 0$  for all finite  $\eta$ .

Physically/

Physically there are two aspects to this limit case. As noted above, a high blowing velocity may supply fresh gas (with zero velocity along the plate) at such a high rate that the available viscous mechanism is not strong enough to accelerate it. Hence, a steady boundary layer is impossible - it is blown away. When dealing with a flat plate as above, the large blowing velocity causes the boundary layer to become thick, which makes the boundary layer approximation incorrect and hence the Blasius equation is no longer an adequate description. Look considered the laminar boundary layer between two two-dimensional jets with (in general) different properties. If the two jets are identical except that one has velocity  $u = 0$  while the other has velocity  $u = u_\infty$ , then the boundary layer between them has the properties of the limit case. The streamline  $f = 0$  is the dividing line for the fluid from the two jets. The present solutions cover the whole possible range of blowing and suction values.

The third boundary condition used in these Tables is therefore a specification of a set of specific values of  $f(0)$ . The values selected are:-

$$f(0) = -1.23849, -1.20, (0.05) 0.50 (0.1) 1.5, 2, 2.5, 3, 4, 5, 6, 10. \dots (n)$$

The important aerodynamic mass flow coefficients are

$$\text{Local friction coefficient} = \frac{\tau}{\frac{1}{2}\rho_0 u_\infty^2} = \frac{f''(0)}{2\text{Re}_L^{\frac{1}{2}}} \dots (12)$$

$$\text{Local mass flow coefficient} = \frac{\rho_0 v_0}{\rho_0 u_\infty} = \frac{f(0)}{2\text{Re}_L^{\frac{1}{2}}} \dots (13)$$

$$\text{Mean friction coefficient} = \frac{\text{Drag}}{\frac{1}{2}\rho_0 u_\infty^2} = \frac{f''(0)}{\text{Re}_L^{\frac{1}{2}}} \dots (14)$$

$$\text{Mean mass flow coefficient} = \frac{\text{Injected Mass}}{\rho_0 u_\infty} = \frac{f(0)}{\text{Re}_L} \dots (15)$$

$$\text{Ratio} \frac{\text{mass flow}}{\text{shear stress}} = \frac{f(0)}{f''(0)} \dots (16)$$

Figures 1, 2 and 3 show a sample set of  $f, f'$  and  $f''$  curves, while the tables give the values to six figures for  $\eta, f, f', f'', f'''$  for each of the  $f(0)$  values given by equation (11). The limit case  $f(0) = -1.23849$  was recomputed in the present work and differs from Lock's values by 1 in the 4th decimal. Note that in this case the co-ordinate is  $\xi$  and is measured point where  $f = 0$  in the boundary region and extends to infinity both ways.

Previous calculations (for cases  $f(0) = -1, -0.75, -0.5, 0, 0.5, 1, 1.5, 5$ ) were given to four decimal places by H. Schlichting and K. Bussmann<sup>4</sup>. These hand computed tables generally agree to better than 5 in the last place with the present ones.

The boundary values of  $f(0), f''(0)$  and their ratio are given in Table I.

The calculations were done on the EDSAC (Electronic Delay Storage Automatic Calculator). A programme of operations for the EDSAC was drawn up for the integration of the differential equation  $f'''' + ff'' = 0$  using the standard sub-routine designed, by Gill<sup>5</sup>, for the step-by-step integration of a set of simultaneous ordinary differential equations. This method has been used extensively on automatic calculating machines because it is flexible, does not require a special procedure for the first few steps, and uses comparatively little storage space of the machine. In order to satisfy two-point boundary conditions, one must integrate over the entire range several times until the values for the unknown initial conditions are obtained which give a solution satisfying the conditions at the far end of the range. For this equation, for an accuracy of six figures, "infinity" occurs on the average at about the value 5 of the independent variable.

In order to speed up the process of iteration, it was suggested by Professor D. R. Hartree that the equation

$$f'''' + ff'' = 0 \quad \dots(17)$$

be differentiated with respect to  $f''(0) = f''_0$ , giving

$$\left[ \frac{\partial f}{\partial f''_0} \right]'''' + f \left[ \frac{\partial f}{\partial f''_0} \right]'' + f'' \left[ \frac{\partial f}{\partial f''_0} \right] = 0 \quad \dots(18)$$

and that (17) and (18) be solved simultaneously. All the boundary conditions of equation (18) are known at the beginning, i.e.,

$$\left[ \frac{\partial f}{\partial f''_0} \right]_0 = 0, \quad \left[ \frac{\partial f}{\partial f''_0} \right]_0' - \text{no} \left[ \frac{\partial f}{\partial f''_0} \right]_0'' = 1. \quad \dots(19)$$

From the solution of (18) we get the variation of  $f'(\infty)$  with  $f''(0)$  and hence a very good estimate of the next trial  $f''(0)$  can be obtained. In order that this process should have any advantage over the solution of  $f'''' + ff'' = 0$  accompanied by an iteration process such as the Newton-Raphson method, it should converge in half as many integrations over the range, since the integration process for the two equations will be approximately twice as slow as for one. Experience has shown that this is usually the case, although it was not actually checked in this instance, since the machine time of the problem was fairly short in any event.

Two programmes were constructed. The first programme was for the determination of the unknown initial condition  $f''(0)$ . Six figure accuracy in the solution was obtained by making the interval in the independent variable 0.1 in most cases. Because the range of integration becomes increasingly contracted for the higher values of  $f(0)$ , the interval  $f(0) \geq 2.5$  was made 0.05 to get the same accuracy. Estimates of  $f''(0)$  obtained by interpolation of the Schlichting and Bussmann<sup>4</sup> values were accurate to about two and a half figures and it took about three or four runs over the range in order that successive values of  $f''(0)$  were the same to at least six figures. The process took about five minutes for each value of  $f(0)$ . The second programme was for a final integration with the tabulation of  $f, f', f'', f'''$  and  $\eta$  at intervals of 0.1 or 0.05, as the case may be. This took about 10 minutes for each value of  $f(0)$ .

The limiting value  $f(0) = -1.23849''$  was found by setting  $f''(0) = 0.000,000,1$  and altering slightly the first programme mentioned above so that  $f(0)$  was adjusted with each integration over the  $\eta$  range and  $f''(0)$  remained fixed. The origin was then shifted to  $f = 0$  by interpolation.

The equation  $f'''' + ff''' = 0$  has a property which might be used to avoid a number of successive integrations over the complete range. By a change of dependent and independent variables from  $f$  and  $\eta$  to  $F$  and  $\xi$  by means of the relations  $\alpha F(\xi) = f(\eta)$  and  $\xi = \alpha\eta$ , we have that  $F$  satisfies the same equation as  $f$ . From values of  $f(0)$ ,  $f'''(0)$  and  $f'(\infty)$ , one can determine a value of  $\alpha$  such that  $F'(\infty) = 2$ . The corresponding values of  $F(0)$  and  $F'''(0)$  would be given by

$$F(0) = \left( \frac{2}{f'(\infty)} \right)^{\frac{1}{2}} f(0) \quad \text{ma} \quad F'''(0) = \left( \frac{2}{f'(\infty)} \right)^{3/2} f'''(0),$$

If the values of  $f(0)$  were at equal intervals, the corresponding values of  $F(0)$  would be slightly off the equal intervals, and it would have been necessary to interpolate in order to have  $F(0)$  at equal intervals. This added complication would likely not have resulted in a saving of very much machine time and would have meant additional programming.

We acknowledge our indebtedness to Dr. M. V. Wilkes for the use of the facilities of the Cambridge University Mathematical Laboratory for the solution of this problem.

---

References

<u>No.</u>	<u>Author(s)</u>	<u>Title, etc.</u>
1	Goldstein (Ed.)	Modern developments in fluid mechanics. Vol.1, pp.116-139.
2	Durand (Ed.)	Aerodynamic theory. Vol.III, pp.80-90.
3	Lock, R. O.	The velocity distribution in the laminar boundary layer between parallel streams. Quart. Jour. Mech. & App. Maths. Vol.IV, Part 1, p.42, 1951.
4	Schlichting and Bussmann	Exakte Lösungen für die Laminare Grenzschicht mit Absaugung und Ausblasen. Schriften der Deutschen Akademie der Luftfahrtforschung, Bd. 7 b, Heft. 2, 1943.
5	Gill, S.	The process for the step-by-step integration of differential equations in an automatic digital computing machine. Proc. Camb. Phil. Soc., Vol.47, p.96, 1951.

---

The Tables

Table I, page 7

The initial values of  $f(0)$ ,  $f''(0)$  and  $f(0)/f''(0)$  for all cases solved. The complete tabulated solution for each of these cases is given in Tables II and III.

Table II, pages 8-10

The limit case  $f(0) = -1.23849\dots$  Values of  $f$ ,  $f'$ ,  $f''$ ,  $f'''$  are given for positive (page 8) and negative (pages 9, 10) values of  $\xi$  beginning with  $\xi = 0$ , at  $f = 0$ .

Table III, pages 11-78

Values of  $f$ ,  $f'$ ,  $f''$ ,  $f'''$  are given for the values of  $f(0)$  given at the top of each page.

---

Table /



Table I

Initial Values

Mass Flow Coefficient	Friction Coefficient	Mass flo., Shear stress $f(0)$ $f''(0)$
$f(0)$	$f''(0)$	
-1.23849...	0	$\infty$
-1.20	0.01343	-89.38
-1.15	0.03860	-29.796
-1.10	0.06912	-15.915
-1.05	0.10383	-10.113
-1.00	0.14207	-7.0385
-0.95	0.18344	-5.1788
-0.90	0.22758	-3.9545
-0.85	0.27427	-3.0991
-0.80	0.32328	-2.4746
-0.75	0.37445	-2.0029
-0.70	0.42762	-1.6369
-0.65	0.48267	-1.3466
-0.60	0.53948	-1.121
-0.55	0.59794	-0.91981
-0.50	0.65796	-0.75992
-0.45	0.71946	-0.62547
-0.40	0.78235	-0.51128
-0.35	0.84657	-0.41343
-0.30	0.91205	-0.32892
-0.25	0.97872	-0.25543
-0.20	1.04654	-0.19110
-0.15	1.11545	-0.13447
-0.10	1.18540	-0.08436
-0.05	1.25634	-0.03980
0	1.32823	0
0.05	1.40103	0.035688
0.10	1.47469	0.067811
0.15	1.54919	0.096825
0.20	1.62448	0.123116
0.25	1.70054	0.147012
0.30	1.77734	0.168792
0.35	1.85484	0.188696
0.40	1.93301	0.206931
0.45	2.01184	0.223676
0.5	2.09129	0.239087
0.6	2.25198	0.266432
0.7	2.41490	0.289867
0.8	2.57988	0.310092
0.9	2.74678	0.327656
1.0	2.91547	0.342998
1.1	3.08582	0.356469
1.2	3.25772	0.368356
1.3	3.43104	0.378894
1.4	3.60574	0.388270
1.5	3.78169	0.396648
2.0	4.67770	0.427561
2.5	5.5953	0.446804
3.0	6.5289	0.459495
4	8.4296	0.474518
5	10.3596	0.482644
6	12.3083	0.487476
10	20.1941	0.495194
$\infty$	$\infty$	0.500000

Table II

$f(0) = -1.23849$

$x$	$f$	$f'$	$f''$	$f'''$
0.0000	0.00000	1.17454	0.79883	0.00000
0.10000	0.12144	1.25426	0.79405	-0.09643
0.20000	0.25082	1.33302	0.77945	-0.19550
0.30000	0.38798	1.40983	0.75500	-0.29293
0.40000	0.53269	1.48371	0.72108	-0.38411
0.50000	0.68460	1.55375	0.67854	-0.46452
0.60000	0.84328	1.61917	0.62867	-0.53014
0.70000	1.00825	1.67930	0.57311	-0.57784
0.80000	1.17895	1.73366	0.51376	-0.60570
0.90000	1.35478	1.78199	0.45265	-0.61324
1.00000	1.53515	1.82420	0.39176	-0.60141
1.10000	1.71942	1.86041	0.33294	-0.57246
1.20000	1.90704	1.89091	0.27773	-0.52965
1.30000	2.09743	1.91612	0.22734	-0.47684
1.40000	2.29010	1.93656	0.18256	-0.41809
1.50000	2.48460	1.95283	0.14380	-0.35727
1.60000	2.68055	1.96552	0.11107	-0.29773
1.70000	2.87761	1.97524	0.08412	-0.24207
1.80000	3.07552	1.98252	0.06247	-0.19212
1.90000	3.27405	1.98788	0.04548	-0.14889
2.00000	3.47304	1.99175	0.03246	-0.11272
2.10000	3.67236	1.99448	0.02271	-0.08339
2.20000	3.87191	1.99638	0.01557	-0.06030
2.30000	4.07162	1.99767	0.01047	-0.04263
2.40000	4.27143	1.99852	0.00690	-0.02947
2.50000	4.47131	1.99901	0.00446	-0.01993
2.60000	4.67124	1.99931	0.00282	-0.01319
2.70000	4.87120	1.99967	0.00175	-0.00854
2.80000	5.07117	1.99980	0.00107	-0.00511
2.90000	5.27116	1.99994	0.00064	-0.00335
3.00000	5.47115	1.99994	0.00037	-0.00203
3.10000	5.67114	1.99996	0.00021	-0.00121
3.20000	5.87114	1.99998	0.00012	-0.00070
3.30000	6.07114	1.99999	0.00007	-0.00040
3.40000	6.27114	1.99999	0.00004	-0.00022
3.50000	6.47114	2.00000	0.00002	-0.00012
3.60000	6.67114	2.00000	0.00001	-0.00007
3.70000	6.87114	2.00000	0.00000	-0.00003
3.80000	7.07114	2.00000	0.00000	-0.00002
3.90000	7.27114	2.00000	0.00000	-0.00001
4.00000	7.47114	2.00000	0.00000	-0.00000

Table II(continued)/

Table II (continued)

$$f(0) = -1.23849$$

$\xi$	$f$	$f'$	$f''$	$f'''$
0.00000	0.00000	1.17454	0.79883	0.00000
-0.10000	-0.11346	1.09481	0.79426	0.09012
-0.20000	-0.21899	1.01597	0.78111	0.17106
-0.30000	-0.31672	0.93884	0.76042	0.24084
-0.40000	-0.40684	0.86410	0.73335	0.29836
-0.50000	-0.48964	0.79234	0.70117	0.34332
-0.60000	-0.56542	0.72400	0.66510	0.37606
-0.70000	-0.63456	0.65941	0.62633	0.39745
-0.80000	-0.69744	0.59879	0.58595	0.40866
-0.90000	-0.75445	0.54224	0.54489	0.41110
-1.00000	-0.80602	0.48980	0.50397	0.40621
-1.10000	-0.85255	0.44142	0.46385	0.39545
-1.20000	-0.89444	0.39699	0.42503	0.38017
-1.30000	-0.93207	0.35636	0.38792	0.36157
-1.40000	-0.96583	0.31934	0.35279	0.34074
-1.50000	-0.99606	0.28573	0.31982	0.31856
-1.60000	-1.02308	0.25530	0.28910	0.29577
-1.70000	-1.04721	0.22783	0.26067	0.27297
-1.80000	-1.06874	0.20309	0.23449	0.25061
-1.90000	-1.08792	0.18086	0.21052	0.22903
-2.00000	-1.10499	0.16092	0.18865	0.20846
-2.10000	-1.12017	0.14406	0.16879	0.18907
-2.20000	-1.13366	0.12710	0.15080	0.17095
-2.30000	-1.14565	0.11284	0.13455	0.15415
-2.40000	-1.15628	0.10013	0.11992	0.13866
-2.50000	-1.16572	0.08881	0.10678	0.12447
-2.60000	-1.17409	0.07873	0.09499	0.11152
-2.70000	-1.18150	0.06977	0.08443	0.09976
-2.80000	-1.18807	0.06181	0.07500	0.08910
-2.90000	-1.19389	0.05474	0.06658	0.07949
-3.00000	-1.19905	0.04846	0.05907	0.07083
-3.10000	-1.20361	0.04290	0.05238	0.06305
-3.20000	-1.20765	0.03796	0.04643	0.05607
-3.30000	-1.21122	0.03359	0.04114	0.04983
-3.40000	-1.21438	0.02971	0.03644	0.04426
-3.50000	-1.21718	0.02628	0.03227	0.03928
-3.60000	-1.21965	0.02324	0.02857	0.03485
-3.70000	-1.22184	0.02055	0.02529	0.03090
-3.80000	-1.22377	0.01817	0.02238	0.02738
-3.90000	-1.22548	0.01607	0.01980	0.02426
-4.00000	-1.22700	0.01421	0.01751	0.02149
-4.10000	-1.22833	0.01256	0.01549	0.01903
-4.20000	-1.22951	0.01110	0.01370	0.01684
-4.30000	-1.23056	0.00981	0.01211	0.01491
-4.40000	-1.23148	0.00867	0.01071	0.01319
-4.50000	-1.23230	0.00766	0.00947	0.01167
-4.60000	-1.23302	0.00677	0.00837	0.01032
-4.70000	-1.23365	0.00599	0.00740	0.00913
-4.80000	-1.23422	0.00529	0.00654	0.00807
-4.90000	-1.23471	0.00467	0.00578	0.00714
-5.00000	-1.23515	0.00413	0.00511	0.00631

Table II (continued)

$$f(0) = -1.23849$$

$z$	$f$	$f'$	$f''$	$f'''$
-5.00000	-1.23315	0.00413	0.00511	0.00631
-5.10000	-1.23554	0.00365	0.00452	0.00558
-5.20000	-1.23589	0.00322	0.00399	0.00493
-5.30000	-1.23619	0.00235	0.00357	0.00436
-5.40000	-1.23646	0.00252	0.00312	0.00305
-5.50000	-1.23669	0.00222	0.00275	0.00~1
-5.60000	-1.23690	0.00197	0.00243	0.00301
-5.70000	-1.23709	0.00174	0.00215	0.00266
-5.80000	-1.23725	0.00153	0.00190	0.00235
-5.90000	-1.23740	0.00136	0.00168	0.00208
-6.00000	-1.23752	0.00120	0.00148	0.00184
-6.10000	-1.23764	0.00106	0.00131	0.00162
-6.20000	-1.23774	0.00093	0.00116	0.00143
-6.30000	-1.23782	0.00083	0.00102	0.00121
-6.40000	-1.23790	0.00073	0.00090	0.00112
-6.50000	-1.23797	0.00064	0.00080	0.00099
-6.60000	-1.23803	0.00057	0.00071	0.00087
-6.70000	-1.23808	0.00050	0.00062	0.00077
-6.80000	-1.23813	0.00044	0.00055	0.00068
-6.90000	-1.23817	0.00039	0.00049	0.00060
-7.00000	-1.23821	0.00035	0.00043	0.00053
-7.10000	-1.23824	0.00031	0.00038	0.00047
-7.20000	-1.23827	0.00027	0.00034	0.00042
-7.30000	-1.23830	0.00024	0.00030	0.00037
-7.40000	-1.23832	0.00021	0.00026	0.00032
-7.50000	-1.23834	0.00019	0.00023	0.00029
-7.60000	-1.23836	0.00016	0.00020	0.00025
-7.70000	-1.23837	0.00015	0.00018	0.00022
-7.80000	-1.23839	0.00013	0.00016	0.00020
-7.90000	-1.23840	0.00011	0.00014	0.00017
-8.00000	-1.23841	0.00010	0.00012	0.00015
-8.10000	-1.23842	0.00009	0.00011	0.0001~
-8.20000	-1.23843	0.00008	0.00010	0.00012
-8.30000	-1.23843	0.00007	0.00009	0.00011
-8.40000	-1.23844	0.00006	0.00008	0.00009
-8.50000	-1.23845	0.00005	0.00007	0.00008
-8.60000	-1.23845	0.00005	0.00006	0.00007
-8.70000	-1.23845	0.00004	0.00005	0.00006
-8.80000	-1.23846	0.00004	0.00005	0.00006
-8.90000	-1.23846	0.00003	0.000~	0.00005
-9.00000	-1.23846	0.00003	0.00004	0.000~
-9.10000	-1.23847	0.00002	0.00003~	0.00004
-9.20000	-1.23847	0.00002	0.00003	0.00003~
-9.30000	-1.23847	0.00002	0.00002	0.00003
-9.40000	-1.23847	0.00002	0.00002~	0.00003
-9.50000	-1.23848	0.00001	0.00002	0.00002
-9.60000	-1.23848	0.00001	0.00002	0.00002
-9.70000	-1.23848	0.00001	0.00002	0.00002
-9.80000	-1.23848	0.00001	0.00001	0.00002
-9.90000	-1.23848	0.00001	0.00001	0.00001
-10.00000	-1.23848	0.00001	0.00001	0.00001

Table III

$f(0) = -1.20$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-1.20000	0.00000	0.01343	0.01612
0.10000	-1.19993	0.00143	0.01514	0.01817
0.20000	-1.19971	0.00304	0.01707	0.02048
0.30000	-1.19932	0.00485	0.01925	0.02309
0.40000	-1.19873	0.00690	0.02170	0.02602
0.50000	-1.19793	0.00920	0.02447	0.02931
0.60000	-1.19688	0.01180	0.02758	0.03301
0.70000	-1.19556	0.01473	0.03108	0.03716
0.80000	-1.19392	0.01803	0.03503	0.04182
0.90000	-1.19194	0.02175	0.03947	0.04704
1.00000	-1.18956	0.02594	0.04446	0.05288
1.10000	-1.18673	0.03066	0.05007	0.05941
1.20000	-1.18340	0.03598	0.05635	0.06670
1.30000	-1.17951	0.04196	0.06343	0.07482
1.40000	-1.17499	0.04869	0.07136	0.08385
1.50000	-1.16975	0.05627	0.08024	0.09385
1.60000	-1.16370	0.06478	0.09017	0.10493
1.70000	-1.15676	0.07434	0.10126	0.11713
1.80000	-1.14880	0.08507	0.11363	0.13054
1.90000	-1.13970	0.09711	0.12741	0.14521
2.00000	-1.12932	0.11060	0.14272	0.16117
2.10000	-1.11752	0.12571	0.15969	0.17845
2.20000	-1.10412	0.14260	0.17845	0.19703
2.30000	-1.08894	0.16146	0.19913	0.21684
2.40000	-1.07176	0.18250	0.22186	0.23778
2.50000	-1.05236	0.20591	0.24672	0.25964
2.60000	-1.03049	0.23191	0.27381	0.28215
2.70000	-1.00588	0.26074	0.30316	0.30494
2.80000	-0.97824	0.29262	0.33479	0.32750
2.90000	-0.94725	0.32777	0.36863	0.34919
3.00000	-0.91257	0.36642	0.40457	0.36920
3.10000	-0.87384	0.40875	0.44238	0.38657
3.20000	-0.83069	0.45495	0.48176	0.40019
3.30000	-0.78272	0.50514	0.52225	0.40878
3.40000	-0.72953	0.55942	0.56330	0.41094
3.50000	-0.67070	0.61779	0.60418	0.40522
3.60000	-0.60583	0.68022	0.64403	0.39018
3.70000	-0.53453	0.74653	0.68186	0.36447
3.80000	-0.45640	0.81648	0.71654	0.32703
3.90000	-0.37112	0.88970	0.74685	0.27717
4.00000	-0.27837	0.96567	0.77155	0.21478

Table III (continued)/

Table III (continued.)

$$f(0) = -1.20$$

$\eta$	$f$	$f'$	$f''$	$f'''$
4.00000	-0.27837	0.96567	0.77155	0.21478
4.10000	-0.17792	1.04378	0.78941	0.14045
4.20000	-0.06957	1.12328	0.79929	0.05561
4.30000	0.04676	1.20334	0.80026	-0.03742
4.40000	0.17108	1.28301	0.79164	-0.13544
4.50000	0.30332	1.36134	0.77313	-0.23450
4.60000	0.44327	1.43732	0.74485	-0.33017
4.70000	0.59067	1.51132	0.70740	-0.41782
4.80000	0.74513	1.57852	0.66170	-0.49306
4.90000	0.90621	1.64211	0.60929	-0.55215
5.00000	1.07337	1.70021	0.55190	-0.59240
5.10000	1.24605	1.75239	0.49149	-0.61242
5.20000	1.42365	1.79847	0.43009	-0.61230
5.30000	1.60554	1.83847	0.36769	-0.59350
5.40000	1.79114	1.87249	0.30433	-0.55870
5.50000	1.97986	1.90033	0.24092	-0.51146
5.60000	2.17116	1.92233	0.17747	-0.45577
5.70000	2.36457	1.93914	0.11407	-0.39566
5.80000	2.55966	1.95100	0.05062	-0.33483
5.90000	2.75606	1.96951	0.10028	-0.27639
6.00000	2.95347	1.97824	0.07538	-0.22263
6.10000	3.15164	1.98475	0.05555	-0.17508
6.20000	3.35036	1.98950	0.04014	-0.13447
6.30000	3.54949	1.99290	0.02843	-0.10090
6.40000	3.74891	1.99529	0.01974	-0.07399
6.50000	3.94852	1.99693	0.01343	-0.05304
6.60000	4.14828	1.99803	0.00896	-0.03718
6.70000	4.34812	1.99876	0.00566	-0.02548
6.80000	4.54802	1.99924	0.00376	-0.01709
6.90000	4.74796	1.99954	0.00236	-0.01121
7.00000	4.94792	1.99973	0.00145	-0.00720
7.10000	5.14790	1.99984	0.00080	-0.00452
7.20000	5.34789	1.99991	0.00052	-0.00278
7.30000	5.54788	1.99995	0.00030	-0.00167
7.40000	5.74788	1.99997	0.00017	-0.00090
7.50000	5.94788	1.99998	0.00010	-0.00057
7.60000	6.14788	1.99999	0.00005	-0.00032
7.70000	6.34788	2.00000	0.00003	-0.00018
7.80000	6.54788	2.00000	0.00001	-0.00010
7.90000	6.74788	2.00000	0.00001	-0.00005
8.00000	6.94788	2.00000	0.00000	-0.00003

Table III (continued)/

Table III (continued)

$$f(0) = -1.15$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-1.15000	0.00000	0.03860	0.04439
0.10000	-1.14980	0.00409	0.04330	0.04979
0.20000	-1.14917	0.00868	0.04858	0.05582
0.30000	-1.14804	0.01383	0.05449	0.06256
0.40000	-1.14638	0.01960	0.06111	0.07006
0.50000	-1.14410	0.02608	0.06853	0.07-0
0.60000	-1.14114	0.03334	0.07692	0.08767
0.70000	-1.13741	0.04147	0.08610	0.09793
0.80000	-1.13281	0.05059	0.09644	0.10925
0.90000	-1.12725	0.06030	0.10738	0.12173
1.00000	-1.12061	0.07223	0.12083	0.13540
1.10000	-1.11276	0.08502	0.13511	0.15034
1.20000	-1.10356	0.09930	0.15094	0.16657
1.30000	-1.09284	0.11526	0.16846	0.18411
1.40000	-1.08044	0.13306	0.18781	0.20291
1.50000	-1.06616	0.15289	0.20909	0.22292
1.60000	-1.04979	0.17494	0.23242	0.24400
1.70000	-1.03109	0.19944	0.25792	0.26593
1.80000	-1.00781	0.22660	0.28563	0.28843
1.90000	-0.98568	0.25664	0.31561	0.31109
2.00000	-0.95838	0.28900	0.34784	0.33336
2.10000	-0.92761	0.32628	0.38224	0.35457
2.20000	-0.89301	0.36631	0.41869	0.37389
2.30000	-0.85422	0.41008	0.45693	0.39032
2.40000	-0.81086	0.45775	0.49662	0.40269
2.50000	-0.76254	0.50944	0.53728	0.40970
2.60000	-0.70884	0.56522	0.57833	0.40494
2.70000	-0.64936	0.62509	0.61900	0.40195
2.80000	-0.58368	0.68898	0.65840	0.38430
2.90000	-0.51143	0.75669	0.69549	0.35570
3.00000	-0.43223	0.82796	0.72914	0.31515
3.10000	-0.34574	0.90237	0.75811	0.26210
3.20000	-0.25167	0.97938	0.78114	0.19659
3.30000	-0.14979	1.05836	0.79703	0.11939
3.40000	-0.03996	1.13851	0.80468	0.03215
3.50000	0.07792	1.21899	0.80321	-0.06259
3.60000	0.20382	1.29883	0.79203	-0.16143
3.70000	0.33763	1.37706	0.77093	-0.26029
3.80000	0.47915	1.45269	0.74012	-0.35463
3.90000	0.62805	1.52479	0.70031	-0.43983
4.00000	0.78396	1.59249	0.65211	-0.51161

Table II (continued)/

Table III (continued)

$f(0) = -1.15$

$\eta$	$f$	$f'$	$f''$	$f'''$
4.00000	0.78396	1.59249	0.65261	-0.51161
4.10000	0.94638	1.65509	0.59855	-0.56646
4.20000	1.11479	1.71205	0.53996	-0.60194
4.30000	1.28859	1.76300	0.47884	-0.61703
4.40000	1.46718	1.80780	0.41722	-0.61214
4.50000	1.64995	1.84649	0.35702	-0.58907
4.60000	1.83629	1.87931	0.29992	-0.55074
4.70000	2.02563	1.90663	0.24726	-0.50086
4.80000	2.21745	1.92894	0.20000	-0.44349
4.90000	2.41127	1.94682	0.15868	-0.38262
5.00000	2.60668	1.96088	0.12347	-0.32186
5.10000	2.80334	1.97172	0.09421	-0.26411
5.20000	3.00094	1.97991	0.07048	-0.21151
5.30000	3.19925	1.98598	0.05170	-0.16539
5.40000	3.39808	1.99039	0.03717	-0.12631
5.50000	3.59728	1.99353	0.02620	-0.09426
5.60000	3.79675	1.99572	0.01811	-0.06874
5.70000	3.99641	1.99722	0.01226	-0.04901
5.80000	4.19618	1.99823	0.00814	-0.03417
5.90000	4.39604	1.99889	0.00530	-0.02330
6.00000	4.59595	1.99932	0.00338	-0.01554
6.10000	4.79590	1.99959	0.00212	-0.01014
6.20000	4.99587	1.99976	0.00130	-0.00648
6.30000	5.19585	1.99986	0.00078	-0.00405
6.40000	5.39584	1.99992	0.00046	-0.00248
6.50000	5.59583	1.99996	0.00027	-0.00148
6.60000	5.79583	1.99998	0.00015	-0.00087
6.70000	5.99583	1.99999	0.00008	-0.00050
6.80000	6.19583	2.00000	0.00005	-0.00028
6.90000	6.39583	2.00000	0.00002	-0.00015
7.00000	6.59583	2.00000	0.00001	-0.00008
7.10000	6.79583	2.00000	0.00001	-0.00004
7.20000	6.99583	2.00000	0.00000	-0.00002
7.30000	7.19583	2.00000	0.00000	-0.00001
7.40000	7.39583	2.00000	0.00000	-0.00001
7.50000	7.59583	2.00000	0.00000	-0.00000

Table III (continued)/



Table III (continued)

$$f(0) = -1.10$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-1.10000	0.00000	0.06912	0.07603
0.10000	-1.09964	0.00731	0.07715	0.08484
0.20000	-1.09851	0.01546	0.08612	0.09460
0.30000	-1.09652	0.02456	0.09611	0.10538
0.40000	-1.09356	0.05472	0.10723	0.11726
0.50000	-1.08953	0.04605	0.11960	0.13031
0.60000	-1.08431	0.05869	0.13333	0.14458
0.70000	-1.07775	0.07277	0.14856	0.16011
0.80000	-1.06970	0.08845	0.16540	0.17693
0.90000	-1.05000	0.10591	0.18399	0.19502
1.00000	-1.04846	0.12531	0.20444	0.21435
1.10000	-1.03487	0.14686	0.22689	0.23480
1.20000	-1.01900	0.17076	0.25144	0.25622
1.30000	-1.00063	0.19722	0.27816	0.27833
1.40000	-0.97947	0.22647	0.30712	0.30081
1.50000	-0.95523	0.25872	0.33832	0.32317
1.60000	-0.92762	0.29420	0.37173	0.34482
1.70000	-0.89628	0.33314	0.40723	0.36500
1.80000	-0.86087	0.37571	0.44465	0.38278
1.90000	-0.82101	0.42212	0.48367	0.39710
2.00000	-0.77631	0.47249	0.52391	0.40672
2.10000	-0.72637	0.52692	0.56482	0.41027
2.20000	-0.67079	0.58545	0.60571	0.40631
2.30000	-0.60915	0.64804	0.64578	0.39338
2.40000	-0.54105	0.71455	0.68404	0.37010
2.50000	-0.46612	0.78475	0.71942	0.33533
2.60000	-0.38399	0.85830	0.75070	0.28826
2.70000	-0.29436	0.93471	0.77665	0.22861
2.80000	-0.19697	1.01341	0.79602	0.15679
2.90000	-0.09163	1.09366	0.80764	0.07400
3.00000	0.02179	1.17464	0.81052	-0.01766
3.10000	0.14330	1.25545	0.80391	-0.11520
3.20000	0.27284	1.33509	0.78741	-0.21483
3.30000	0.41024	1.41260	0.76102	-0.31220
3.40000	0.55525	1.48698	0.72520	-0.40267
3.50000	0.70751	1.55735	0.68087	-0.48172
3.60000	0.86656	1.62292	0.62937	-0.54539
3.70000	1.03191	1.68304	0.57240	-0.59067
3.80000	1.20297	1.73728	0.51191	-0.61581
3.90000	1.37916	1.78538	0.44993	-0.62052
4.00000	1.55984	1.82728	0.38845	-0.60592

Table III (continued)/

Table III (continued)

$$f(0) = -1.10$$

$\eta$	$f$	$f'$	$f''$	$f'''$
4.00000	1.55984	1.82728	0.38545	-0.60592
4.10000	1.74441	1.86314	0.32931	-0.57444
4.20000	1.93228	1.89327	0.27401	-0.52947
4.30000	2.12289	1.91811	0.22373	-0.47496
4.40000	2.31575	1.93821	0.17921	-0.41499
4.50000	2.51040	1.95416	0.14079	-0.35343
4.60000	2.70646	1.96657	0.10847	-0.29356
4.70000	2.90361	1.97604	0.08194	-0.23791
4.80000	3.10159	1.98313	0.06069	-0.18822
4.90000	3.30018	1.98833	0.04407	-0.14542
5.00000	3.49921	1.99208	0.03137	-0.10976
5.10000	3.69855	1.99471	0.02189	-0.08095
5.20000	3.89812	1.99654	0.01497	-0.05836
5.30000	4.09784	1.99777	0.01004	-0.04114
5.40000	4.29766	1.99859	0.00660	-0.02836
5.50000	4.49755	1.99913	0.00425	-0.01912
5.60000	4.69748	1.99947	0.00269	-0.01261
5.70000	4.89744	1.99968	0.00166	-0.00814
5.80000	5.09742	1.99981	0.00101	-0.00514
5.90000	5.29740	1.99939	0.00060	-0.00318
6.00000	5.49740	1.99994	0.00035	-0.00193
6.10000	5.69739	1.99997	0.00020	-0.00114
6.20000	5.89739	1.99998	0.00011	-0.00066
6.30000	6.09739	1.99999	0.00006	-0.00038
6.40000	6.29739	2.00000	0.00003	-0.00021
6.50000	6.49739	2.00000	0.00002	-0.00011
6.60000	6.69739	2.00000	0.00001	-0.00006
6.70000	6.89739	2.00000	0.00000	-0.00003
6.80000	7.09739	2.00000	0.00000	-0.00002
6.90000	7.29739	2.00000	0.00000	-0.00001
7.00000	7.49759	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = -1.05$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-1.00000	0.00000	0.10383	0.10902
0.10000	-1.04946	0.01095	0.11532	0.12102
0.20000	-1.04777	0.02311	0.12807	0.13419
0.30000	-1.04480	0.03661	0.14220	0.14857
0.40000	-1.04040	0.05160	0.15783	0.16420
0.50000	-1.03442	0.06823	0.17508	0.18111
0.60000	-1.02669	0.08667	0.19409	0.17727
0.70000	-1.01702	0.10711	0.21497	0.21863
0.80000	-1.00520	0.12773	0.23785	0.23909
0.90000	-0.97100	0.15475	0.26282	0.26046
1.00000	-0.77416	0.18237	0.28996	0.28247
1.10000	-0.95443	0.21281	0.31933	0.30477
1.20000	-0.73150	0.24631	0.35091	0.32688
1.30000	-0.70506	0.28307	0.38467	0.34815
1.40000	-0.87477	0.32331	0.42049	0.36783
1.50000	-0.84027	0.36723	0.45816	0.38498
1.60000	-0.80119	0.41499	0.49737	0.39849
1.70000	-0.75714	0.46674	0.53769	0.40711
1.80000	-0.70771	0.52255	0.57858	0.40947
1.90000	-0.65250	0.58245	0.61933	0.40411
2.00000	-0.59109	0.64638	0.65909	0.38758
2.10000	-0.52309	0.71420	0.69689	0.36454
2.20000	-0.44812	0.78566	0.73161	0.32785
2.30000	-0.36585	0.86038	0.76205	0.27879
2.40000	-0.27575	0.93789	0.78675	0.21716
2.50000	-0.17820	1.01755	0.80508	0.14346
2.60000	-0.07240	1.09864	0.81529	0.05702
2.70000	0.04155	1.18031	0.81660	-0.03373
2.80000	0.16365	1.26164	0.80832	-0.13228
2.90000	0.27383	1.3414	0.77007	-0.23215
3.00000	0.43170	1.41933	0.76179	-0.32910
3.10000	0.57759	1.49411	0.72452	-0.41848
3.20000	0.73051	1.56555	0.67869	-0.49579
3.30000	0.89021	1.62923	0.62590	-0.55718
3.40000	1.05617	1.68876	0.56788	-0.59778
3.50000	1.22781	1.74270	0.50662	-0.62203
3.60000	1.40450	1.79024	0.44416	-0.62383
3.70000	1.58565	1.83156	0.38250	-0.60650
3.80000	1.77061	1.86683	0.32341	-0.57264
3.90000	1.95882	1.89638	0.26840	-0.52575
4.00000	2.14971	1.92068	0.21857	-0.46985

Table III (continued)/

Table III (continued)

$$f(0) = -1.05$$

$\eta$	$f$	$f'$	$f''$	$f'''$
4.00000	2.14971	1.92068	0.21857	-0.46985
4.10000	2.34280	1.94029	0.17460	-0.40905
4.20000	2.53764	1.95580	0.13679	-0.34714
4.30000	2.73385	1.96785	0.10510	-0.28733
4.40000	2.93111	1.97701	0.07918	-0.23208
4.50000	3.12917	1.98386	0.05848	-0.18300
4.60000	3.32782	1.98886	0.04235	-0.14093
4.70000	3.52690	1.99245	0.03006	-0.10602
4.80000	3.72628	1.99498	0.02092	-0.07795
4.90000	3.92587	1.99672	0.01427	-0.05602
5.00000	4.12560	1.99790	0.00954	-0.03937
5.10000	4.32543	1.99868	0.00625	-0.02705
5.20000	4.52533	1.99918	0.00402	-0.01819
5.30000	4.72526	1.99950	0.00253	-0.01196
5.40000	4.92522	1.99970	0.00156	-0.00770
5.50000	5.12520	1.99983	0.00095	-0.00485
5.60000	5.32519	1.99990	0.00056	-0.00299
5.70000	5.52518	1.99994	0.00033	-0.00180
5.80000	5.72518	1.99997	0.00019	-0.00107
5.90000	5.92517	1.99998	0.00010	-0.00062
6.00000	6.12517	1.99999	0.00006	-0.00035
6.10000	6.32517	2.00000	0.00003	-0.00019
6.20000	6.52517	2.00000	0.00002	-0.00011
6.30000	6.72517	2.00000	0.00001	-0.00006
6.40000	6.92517	2.00000	0.00000	-0.00003
6.50000	7.12517	2.00000	0.00000	-0.00001

Table III (continued)/

Table III (continued)

$$f(0) = -1.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-1.00000	0.00000	0.14208	0.14208
0.10000	-0.99927	0.01494	0.15701	0.15690
0.20000	-0.99696	0.03145	0.17350	0.17297
0.30000	-0.99292	0.04970	0.19165	0.19029
0.40000	-0.98696	0.06984	0.21160	0.20884
0.50000	-0.97888	0.09208	0.23346	0.22852
0.60000	-0.96846	0.11660	0.25734	0.24922
0.70000	-0.95547	0.14362	0.28333	0.27071
0.80000	-0.93965	0.17334	0.31149	0.29270
0.90000	-0.92071	0.20599	0.34187	0.31476
1.00000	-0.89835	0.24179	0.37443	0.33637
1.10000	-0.87224	0.28095	0.40910	0.35684
1.20000	-0.84204	0.32367	0.44573	0.37532
1.30000	-0.80738	0.37015	0.48407	0.39083
1.40000	-0.76788	0.42053	0.52376	0.40218
1.50000	-0.72314	0.47493	0.56433	0.40809
1.60000	-0.67276	0.53341	0.60545	0.40712
1.70000	-0.61632	0.59595	0.64547	0.39782
1.80000	-0.55343	0.66345	0.68439	0.37876
1.90000	-0.48371	0.73274	0.72086	0.34868
2.00000	-0.40677	0.80651	0.75372	0.30659
2.10000	-0.32230	0.88332	0.78176	0.25196
2.20000	-0.23002	0.96265	0.80370	0.18487
2.30000	-0.12971	1.04382	0.81834	0.10615
2.40000	-0.02122	1.12604	0.82460	0.01750
2.50000	0.09550	1.20843	0.82160	-0.07847
2.60000	0.22044	1.29003	0.80877	-0.17828
2.70000	0.35345	1.36985	0.78595	-0.27779
2.80000	0.49432	1.44690	0.75338	-0.37241
2.90000	0.64271	1.52023	0.71179	-0.45747
3.00000	0.79821	1.58899	0.66235	-0.52869
3.10000	0.96033	1.65249	0.60663	-0.58256
3.20000	1.12851	1.71017	0.54649	-0.61672
3.30000	1.30216	1.76170	0.48397	-0.63021
3.40000	1.48066	1.80695	0.42112	-0.62354
3.50000	1.66334	1.84598	0.35988	-0.59860
3.60000	1.84964	1.87904	0.30191	-0.55843
3.70000	2.03896	1.90652	0.24857	-0.50683
3.80000	2.23078	1.92894	0.20079	-0.44792
3.90000	2.42460	1.94688	0.15910	-0.38575
4.00000	2.62003	1.96097	0.12363	-0.32392

Table III(continued)/

Table III (continued)

$$f(0) = -1.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
4.00000	2.62003	1.96097	0.12363	-0.32392
4.10000	2.81669	1.97181	0.09421	-0.26536
4.20000	3.01430	1.97999	0.07039	-0.21216
4.30000	3.21262	1.98605	0.05156	-0.16563
4.40000	3.41145	1.99045	0.03702	-0.12630
4.50000	3.61066	1.99357	0.02606	-0.09410
4.60000	3.81014	1.99575	0.01798	-0.06852
4.70000	4.00979	1.99725	0.01217	-0.04878
4.80000	4.20957	1.99824	0.00807	-0.03396
4.90000	4.40943	1.99890	0.00524	-0.02312
5.00000	4.60934	1.99932	0.00334	-0.01540
5.10000	4.80929	1.99959	0.00209	-0.01004
5.20000	5.00926	1.99976	0.00128	-0.00640
5.30000	5.20924	1.99986	0.00077	-0.00400
5.40000	5.40923	1.99991	0.00045	-0.00244
5.50000	5.60922	1.99995	0.00027	-0.00146
5.60000	5.80922	1.99997	0.00015	-0.00085
5.70000	6.00921	1.99998	0.00008	-0.00049
5.80000	6.20921	1.99999	0.00004	-0.00028
5.90000	6.40921	1.99999	0.00002	-0.00015
6.00000		1.99999	0.00001	-0.00008
6.10000	6.80921	1.99999	0.00001	-0.00004
6.20000	7.00921	1.99999	0.00000	-0.00002
6.30000	7.20921	1.99999	0.00000	-0.00001
6.40000	7.40921		0.00000	-0.00001
6.50000	7.60921	1.99999	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = -0.95$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	-0.95000	0.00000	0.18344	0.17427
0.10000	-0.94905	0.01924	0.20172	0.19144
0.20000	-0.94609	0.04040	0.22177	0.20981
0.30000	-0.94090	0.06366	0.24372	0.22931
0.40000	<b>493328</b>	0.08921	0.26766	0.24980
0.50000	-0.92298	0.11726	0.29370	0.27108
0.60000	-0.90974	0.14802	0.32190	0.29284
0.70000	-0.89327	0.18171	0.35227	0.31468
0.80000	-0.87329	0.21855	0.38482	0.33606
0.90000	-0.84945	0.25875	0.41945	0.35630
1.00000	-0.82142	0.30251	0.45601	0.37458
1.10000	-0.78883	0.35001	0.49426	0.38989
1.20000	-0.75129	0.40140	0.53385	0.40108
1.30000	-0.70861	0.45680	0.57430	0.40684
1.40000	-0.65979	0.51627	0.61499	0.40577
1.50000	-0.60502	0.57979	0.65517	0.39640
1.60000	-0.54370	0.64726	0.69395	0.37730
1.70000	-0.47545	0.71849	0.73027	0.34720
1.80000	-0.39989	0.79319	0.76299	0.30511
1.90000	-0.31671	0.87093	0.79087	0.25047
2.00000	-0.22562	0.95116	0.81266	0.18335
2.10000	-0.12641	1.03322	0.82715	0.10456
2.20000	-0.01894	1.11631	0.83324	0.01578
2.30000	0.09686	1.19956	0.83006	-0.08040
2.40000	0.22094	1.28200	0.81703	-0.18052
2.50000	0.35319	1.36263	0.79396	-0.28042
2.60000	0.49338	1.44046	0.76111	-0.37551
2.70000	0.64116	1.51455	0.71918	-0.46111
2.80000	0.79613	1.58403	0.66935	-0.53289
2.90000	0.95779	1.64820	0.61318	-0.58730
3.00000	1.12558	1.70652	0.55255	-0.62194
3.10000	1.29889	1.75863	0.48949	-0.63579
3.20000	1.47709	1.80441	0.42607	-0.62934
3.30000	1.65956	1.84390	0.36424	-0.60447
3.40000	1.84567	1.87736	0.30569	-0.56420
3.50000	2.03485	1.90519	0.25178	-0.51234
3.60000	2.22654	1.92791	0.20347	-0.45304
3.70000	2.42028	1.94609	0.16129	-0.39037
3.80000	2.61563	1.96037	0.12539	-0.32797
3.90000	2.81224	1.97137	0.09559	-0.26882
4.00000	3.00981	1.97968	0.07145	-0.21505

Table II. (continued)

$f(0) = -0.95$

$\eta$	$f$	$f'$	$f''$	$f'''$
4.00000	3.00981	1.97968	0.07145	-0.22505
4.10000	3.20811	1.98583	0.05236	-0.16797
4.20000	3.40692	1.99029	0.03762	-0.12815
4.30000	3.60612	1.99347	0.02649	-0.09553
4.40000	3.80559	1.99569	0.01829	-0.06960
4.50000	4.00524	1.99720	0.01238	-0.04958
4.60000	4.20501	1.99822	0.00821	-0.03453
4.70000	4.40487	1.99889	0.00534	-0.02352
4.80000	4.60478	1.99932	0.00340	-0.01567
4.90000	4.80473	1.99959	0.00213	-0.01022
5.00000	5.00470	1.99976	0.00130	-0.00652
5.10000	5.20468	1.99986	0.00078	-0.00407
5.20000	5.40467	1.99992	0.00046	-0.00249
5.30000	5.60466	1.99996	0.00027	-0.00149
5.40000	5.80466	1.99998	0.00015	-0.00087
5.50000	6.00466	1.99999	0.00008	-0.00050
5.60000	6.20466	2.00000	0.00005	-0.00028
5.70000	6.40466	2.00000	0.00002	-0.00015
5.80000	6.60466	2.00000	0.00001	-0.00008
5.90000	6.80466	2.00000	0.00001	-0.00004
6.00000	7.00466	2.00000	0.00000	-0.00002
6.10000	7.20466	2.00000	0.00000	-0.00001
6.20000	7.40466	2.00000	0.00000	-0.00001
6.30000	7.60466	2.00000	0.00000	-0.00000
6.40000	7.80466	2.00000	0.00000	-0.00000
6.50000	8.00466	2.00000	0.00000	-0.00000

Table III (continued)/



Table III (continued)

$$f(0) = 0.90$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.90000	0.00000	0.22759	0.20483
0.10000	-0.89883	0.02381	0.24901	0.22382
0.20000	-0.89516	0.04987	0.27239	0.24383
0.30000	-0.88877	0.07836	0.29781	0.26468
0.40000	-0.87940	0.10950	0.32534	0.28611
0.50000	-0.86678	0.14350	0.35503	0.30773
0.60000	-0.85060	0.18058	0.38688	0.32908
0.70000	-0.83055	0.22095	0.42082	0.34951
0.80000	-0.80629	0.26481	0.45673	0.36825
0.90000	-0.77747	0.31235	0.49438	0.38437
1.00000	-0.74370	0.36373	0.53347	0.39674
1.10000	-0.70459	0.41908	0.57356	0.40413
1.20000	-0.65975	0.47846	0.61409	0.40514
1.30000	-0.60876	0.54189	0.65433	0.39833
1.40000	-0.55124	0.60929	0.69345	0.38225
1.50000	-0.48678	0.68050	0.73043	0.35556
1.60000	-0.41502	0.75527	0.76417	0.31714
1.70000	-0.33562	0.83319	0.79344	0.26629
1.80000	-0.24029	0.91376	0.81700	0.20285
1.90000	-0.15280	0.99636	0.83361	0.12737
2.00000	-0.0489%	1.08022	0.84212	0.04124
2.10000	0.06326	1.16448	0.84158	-0.05324
2.20000	0.18390	1.24821	0.83130	-0.15288
2.30000	0.31285	1.33040	0.81097	-0.25371
2.40000	0.44990	1.41007	0.78067	-0.35122
2.50000	0.59475	1.40623	0.74099	-0.44070
2.60000	0.74700	1.55799	0.69295	-0.51763
2.70000	0.90617	1.62458	0.63801	-0.57815
2.80000	1.07172	1.68542	0.57796	-0.61942
2.90000	1.24305	1.74007	0.51482	-0.63995
3.00000	1.41952	1.78835	0.45067	-0.63973

Table III (continued)/

Table III (continued)

$$f(0) = 0.90$$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	1.41952	1.78835	0.45067	-0.63973
3.10000	1.60050	1.83024	0.38752	-0.62023
3.20000	1.78536	1.86595	0.32718	-0.58413
3.30000	1.97350	1.89582	0.27113	-0.53507
3.40000	2.16435	1.92035	0.22046	-0.47715
3.50000	2.35741	1.94011	0.17585	-0.41456
3.60000	2.55224	1.95573	0.13758	-0.35113
3.70000	2.74864	1.96784	0.10555	-0.29010
3.80000	2.94571	1.97704	0.07940	-0.23389
3.90000	3.14377	1.98389	0.05856	-0.18410
4.00000	3.34242	1.98890	0.04234	-0.14153
4.10000	3.54150	1.99249	0.03001	-0.10629
4.20000	3.74089	1.99501	0.02086	-0.07802
4.30000	3.94048	1.99674	0.01421	-0.05598
4.40000	4.14022	1.99791	0.00949	-0.03927
4.50000	4.34005	1.99869	0.00621	-0.02694
4.60000	4.53995	1.99919	0.00398	-0.01808
4.70000	4.73988	1.99944	0.00251	-0.01187
4.80000	4.93984	1.99954	0.00154	-0.00763
4.90000	5.13982	1.99983	0.00093	-0.00480
5.00000	5.33981	1.99990	0.00055	-0.00295
5.10000	5.53980	1.99995	0.00032	-0.00178
5.20000	5.73980	1.99997	0.00018	-0.00105
5.30000	5.93979	1.99998	0.00010	-0.00061
5.40000	6.13979	1.99999	0.00006	-0.00037
5.50000	6.33979	2.00000	0.00003	-0.00019
5.60000	6.53979	2.00000	0.00002	-0.00010
5.70000	6.73979	2.00000	0.00001	-0.00005
5.80000	6.93979	2.00000	0.00000	-0.00003
5.90000	7.13979	2.00000	0.00000	-0.00001
6.00000	7.33979	2.00000	0.00000	-0.00001

Table III (continued)/

Table III (continued)

$$f(0) = -0.85$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	-0.85000	0.00000	0.27427	0.23313
0.10000	-0.86859	0.02863	0.29859	0.25338
0.20000	-0.046'9	0.05979	0.32497	0.27434
0.30000	-0.83654	0.09369	0.35347	0.29569
0.40000	-0.82535	0.13055	0.38411	0.31703
0.50000	-0.81032	0.17058	0.41636	0.33779
0.60000	-0.79112	0.21399	0.45163	0.35729
0.70000	-0.76741	0.26097	0.48825	0.37468
0.80000	-0.73881	0.31169	0.52646	0.38895
0.90000	-0.70494	0.36630	0.56589	0.39892
1.00000	-0.66541	0.42490	0.60606	0.40328
1.10000	-0.61982	0.48752	0.64631	0.40060
1.20000	-0.56777	0.55414	0.68589	0.38943
1.30000	-0.50887	0.62464	0.72387	0.36835
1.40000	-0.44272	0.69882	0.75919	0.33611
1.50000	-0.36899	0.77635	0.79069	0.29176
1.60000	-0.28735	0.85679	0.81712	0.23480
1.70000	-0.19755	0.93957	0.83723	0.16540
1.80000	-0.09939	1.02399	0.84982	0.08446
1.90000	0.00727	1.10924	0.85380	-0.00621
2.00000	0.12246	1.19443	0.84834	-0.10389
2.10000	0.24612	1.27858	0.83291	-0.20500
2.20000	0.37811	1.36068	0.80737	-0.30527
2.30000	0.51816	1.44071	0.77204	-0.40004
2.40000	0.66592	1.51871	0.72770	-0.48459
2.50000	0.82095	1.58501	0.67560	-0.55464
2.60000	0.98274	1.64970	0.61737	-0.60672
2.70000	1.15069	1.70834	0.55494	-0.63856
2.80000	1.32419	1.76062	0.49037	-0.64934
2.90000	1.50260	1.80641	0.42575	-0.63973
3.00000	1.68526	1.84583	0.36303	-0.61181

Table III (continued)/

Table III (continued)

$$f(0) = -0.85$$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	1.68526	1.84583	0.36303	-0.61181
3.10000	1.87156	1.87914	0.30389	-0.56876
3.20000	2.06090	1.90677	0.24966	-0.51452
3.30000	2.25274	1.92926	0.20123	-0.45331
3.40000	2.44660	1.94723	0.15909	-0.38923
3.50000	2.64206	1.96129	0.12336	-0.32591
3.60000	2.83875	1.97210	0.09379	-0.26625
3.70000	3.03639	1.98024	0.06992	-0.21230
3.80000	3.23473	1.98625	0.05110	-0.16530
3.90000	3.43359	1.99060	0.03661	-0.12572
4.00000	3.63281	1.99369	0.02572	-0.09343
4.10000	3.83229	1.99584	0.01771	-0.06786
4.20000	4.03196	1.99731	0.01195	-0.04819
4.30000	4.23174	1.99829	0.00791	-0.03346
4.40000	4.43160	1.99893	0.00513	-0.02273
4.50000	4.63152	1.99935	0.00326	-0.01510
4.60000	4.83147	1.99961	0.00203	-0.00982
4.70000	5.03144	1.99977	0.00124	-0.00625
4.80000	5.23142	1.99986	0.00074	-0.00389
4.90000	5.43141	1.99992	0.00044	-0.00237
5.00000	5.63140	1.99996	0.00025	-0.00141
5.10000	5.83140	1.99997	0.00014	-0.00083
5.20000	6.03140	1.99999	0.00008	-0.00047
5.30000	6.23140	1.99999	0.00004	-0.00026
5.40000	6.43140	1.99999	0.00002	-0.00015
5.50000	6.63140	2.00000	0.00001	-0.00008
5.60000	6.83140	2.00000	0.00001	-0.00004
5.70000	7.03140	2.00000	0.00000	-0.00002
5.80000	7.23139	2.00000	0.00000	-0.00001
5.90000	7.43139	2.00000	0.00000	-0.00001
6.00000	7.63139	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = -0.80$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	-0.80000	0.00000	0.32329	0.25863
0.10000	-0.79834	0.03366	0.35019	0.27957
0.20000	-0.79318	0.07011	0.37921	0.30078
0.30000	-0.78422	0.10957	0.41034	0.32180
0.40000	-0.77115	0.15225	0.44355	0.34204
0.50000	-0.75365	0.19834	0.47870	0.36078
0.60000	-0.73137	0.24805	0.51562	0.37711
0.70000	-0.70392	0.30152	0.55401	0.38998
0.80000	-0.67093	0.35888	0.59346	0.39817
0.90000	-0.63201	0.42023	0.63344	0.40034
1.00000	-0.58675	0.48557	0.67328	0.39505
1.10000	-0.53476	0.55485	0.71216	0.38084
1.20000	-0.47566	0.62794	0.74910	0.35632
1.30000	-0.40906	0.70457	0.78304	0.32031
1.40000	-0.33463	0.78440	0.81275	0.27198
1.50000	-0.25209	0.86694	0.83701	0.21100
1.60000	-0.16118	0.95158	0.85454	0.13773
1.70000	-0.06173	1.03759	0.86413	0.05334
1.80000	0.04636	1.12412	0.86491	-0.04010
1.90000	0.16308	1.21025	0.85596	-0.13959
2.00000	0.28836	1.29497	0.83692	-0.24133
2.10000	0.42200	1.37729	0.80777	-0.34088
2.20000	0.56371	1.45621	0.76897	-0.43347
2.30000	0.71310	1.53079	0.72146	-0.51447
2.40000	0.86969	1.60025	0.66660	-0.57974
2.50000	1.03295	1.66393	0.60614	-0.62612
2.60000	1.20227	1.72136	0.54207	-0.65172
2.70000	1.37701	1.77229	0.47651	-0.65615
2.80000	1.55651	1.81668	0.41151	-0.64053
2.90000	1.74013	1.85468	0.34899	-0.60729
3.00000	1.92725	1.88661	0.29053	-0.55992

Table III (continued)/

Table III (continued)

$$f(0) = -0.80$$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	1.92725	1.88661	0.29053	-0.55992
3.10000	2.11727	1.91296	0.23734	-0.50252
3.20000	2.30967	1.93428	0.19022	-0.43934
3.30000	2.50398	1.95122	0.14953	-0.37443
3.40000	2.69979	1.96440	0.11528	-0.31123
3.50000	2.89676	1.97448	0.08714	-0.25243
3.60000	3.09460	1.98202	0.06659	-0.19987
3.70000	3.29309	1.98756	0.04693	-0.15455
3.80000	3.49206	1.99154	0.03343	-0.11674
3.90000	3.69136	1.99435	0.02334	-0.08617
4.00000	3.89090	1.99630	0.01598	-0.06218
4.10000	4.09060	1.99762	0.01072	-0.04386
4.20000	4.29041	1.99850	0.00705	-0.03026
4.30000	4.49029	1.99907	0.00455	-0.02042
4.40000	4.69022	1.99943	0.00287	-0.01348
4.50000	4.89018	1.99966	0.00178	-0.00871
4.60000	5.09015	1.99980	0.00108	-0.00551
4.70000	5.29013	1.99989	0.00064	-0.00341
4.80000	5.49013	1.99994	0.00038	-0.00206
4.90000	5.69012	1.99997	0.00022	-0.00122
5.00000	5.89012	1.99998	0.00012	-0.00071
5.10000	6.09012	1.99999	0.00007	-0.00040
5.20000	6.29012	2.00000	0.00004	-0.00023
5.30000	6.49012	2.00000	0.00002	-0.00012
5.40000	6.69012	2.00000	0.00001	-0.00007
5.50000	6.89012	2.00000	0.00000	-0.00003
5.60000	7.09012	2.00000	0.00000	-0.00002
5.70000	7.29012	2.00000	0.00000	-0.00001
5.80000	7.49012	2.00000	0.00000	-0.00000
5.90000	7.69012	2.00000	0.00000	-0.00000
6.00000	7.89012	2.00000	0.00000	-0.00000~

Table III (continued)/

Table III (continued)

$$f(0) = -0.75$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.75000	0.00000	0.37446	0.28084
0.10000	-0.74808	0.03888	0.40359	0.30192
0.20000	-0.74212	0.08079	0.43483	0.32270
0.30000	-0.73181	0.12592	0.46810	0.34257
0.40000	-0.71682	0.17447	0.50329	0.36077
0.50000	-0.69680	0.22663	0.54017	0.37639
0.60000	-0.67137	0.28255	0.57844	0.38835
0.70000	-0.64016	0.34235	0.61768	0.39541
0.80000	-0.60277	0.40610	0.65732	0.39621
0.90000	-0.55881	0.47381	0.69666	0.38930
1.00000	-0.50788	0.54540	0.73487	0.37323
1.10000	-0.44960	0.62071	0.77096	0.34663
1.20000	-0.38362	0.69948	0.80381	0.30836
1.30000	-0.30960	0.78133	0.83222	0.25766
1.40000	-0.22727	0.86574	0.85492	0.19430
1.50000	-0.13639	0.95208	0.87067	0.11875
1.60000	-0.03681	1.02960	0.87830	0.03233
1.70000	0.07154	1.12744	0.87685	-0.06273
1.80000	0.18865	1.21464	0.86557	-0.16329
1.90000	0.31461	1.30021	0.84413	-0.26541
2.00000	0.44861	1.38313	0.81259	-0.36453
2.10000	0.59092	1.46241	0.77149	-0.45589
2.20000	0.74094	1.53714	0.72183	-0.53483
2.30000	0.89817	1.60654	0.66507	-0.59734
2.40000	1.06205	1.66998	0.60301	-0.64042
2.50000	1.23195	1.72703	0.53769	-0.66241
2.60000	1.40723	1.77748	0.47124	-0.66314
2.70000	1.58723	1.82131	0.40573	-0.64398
2.80000	1.77128	1.85872	0.34302	-0.60758
2.90000	1.95877	1.89006	0.28467	-0.55759
3.00000	2.14911	1.91583	0.23182	-0.49820

Table III(continued)/

Table III (continued)

$$f(0) = -0.75$$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	2.14911	1.91583	0.23182	-0.49820
3.10000	2.35127	1.93663	0.18520	-0.43369
3.20000	2.73226	1.95309	0.14512	-0.36806
3.30000		1.96587	0.11151	-0.30468
3.40000	2.92936	1.97560	0.08402	-0.24613
3.50000	3.12730	1.98286	0.06207	-0.19412
3.60000	3.32567	1.98817	0.04496	-0.14952
3.70000	3.52489	1.99198	0.03192	-0.11251
3.80000	3.72423	1.99466	0.02222	-0.08274
3.90000	3.92379	1.99651	0.01516	-0.05947
4.00000	4.12351	1.99776	0.01014	-0.04180
4.10000	4.32333	1.99859	0.00665	-0.02873
4.20000	4.52322	1.99913	0.00427	-0.01932
4.30000		1.99947	0.00269	-0.01271
4.40000	4.72315	1.99969	0.00166	-0.00818
4.50000	5.12308	1.99982	0.00101	-0.00515
4.60000			0.00060	-0.00318
4.70000	5.32303	1.99989	1.999400035	-0.00192
4.80000	5.72306	1.99997	0.00020	-0.00113
4.90000	5.92306	1.99998	0.00011	-0.00066
5.00000	6.12305	1.99999	0.00006	-0.00037
5.10000	6.32305	2.00000	0.00003	-0.00021
5.20000	6.52305	2.00000	0.00002	-0.00011
5.30000	6.72305	2.00000	0.00001	-0.00006
5.40000	6.92305	2.00000	0.00000	-0.00003
5.50000	7.12305	2.00000	0.00000	-0.00002
5.60000	7.32305	2.00000	0.00000	-0.00001
5.70000	7.52305	2.00000	0.00000	-0.00000
5.80000	7.72305	2.00000	0.00000	-0.00000
5.90000	7.92305	2.00000	0.00000	0.00000
6.00000	8.12305	2.00000	0.00000	-0.00000

Table III (continued)/



Table III (continued)

$$f(0) = -0.70$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.70000	0.00000	0.42763	0.29934
0.10000	-0.69781	0.04429	0.45860	0.32002
0.20000	-0.69103	0.09179	0.49160	0.33971
0.30000	-0.67934	0.14268	0.52649	0.35766
0.40000	-0.63979	0.19714	0.56304	0.37295
0.50000	-0.61119	0.25533	0.60095	0.38448
0.60000	-0.58117	0.31736	0.63977	0.39102
0.70000	-0.57619	0.38330	0.67894	0.39120
0.80000	-0.53440	0.45314	0.71775	0.38356
0.90000	-0.48543	0.52681	0.75535	0.36667
1.00000	-0.42891	0.60413	0.79073	0.33915
1.10000	-0.36449	0.68484	0.32279	0.29990
1.20000	-0.29184	0.76854	0.85029	0.24815
1.30000	-0.21070	0.85471	0.87199	0.18373
1.40000	-0.12084	0.94270	0.88663	0.10714
1.50000	-0.02212	1.03176	0.89306	0.01976
1.60000	0.08552	1.12101	0.89030	-0.07614
1.70000	0.20205	1.20949	0.85479	-0.17733
1.80000	0.32736	1.29620	0.82180	-0.27982
1.90000	0.46120	1.38011		-0.37901
2.00000	0.60325	1.46024	0.77926	-0.47009
2.10000	0.75309	1.53568	0.72821	-0.54841
2.20000	0.91021	1.60565	0.67014	-0.60996
2.30000	1.07402	1.66953	0.60688	-0.65180
2.40000	1.24390	1.72692	0.54049	-0.67231
2.50000	1.41918	1.77760	0.47313	-0.67145
2.60000	1.59919	1.82158	0.40687	-0.65066
2.70000	1.78328	1.85907	0.34357	-0.61268
2.80000	1.97080	1.89044	0.28478	-0.56125
2.90000	2.16118	1.91621	0.23163	-0.50060
3.00000	2.35388	1.93698	0.18483	-0.43506

Table III (continued)/

Table III (continued)

$$f(0) = -0.70$$

$n$	$f$	$f'$	$f''$	$f'''$
3.00000	2.35388	1.93698	0.18483	-0.43506
3.10000	2.54843	1.95340	0.14465	-0.36863
3.20000	2.74443	1.96613	0.11102	-0.30468
3.30000	2.94155	1.97581	0.08355	-0.24576
3.40000	3.13951	1.98302	0.06165	-0.19354
3.50000	3.33809	1.98830	0.04459	-0.14886
3.60000	3.53712	1.99208	0.03162	-0.11185
3.70000	3.73647	1.99473	0.02198	-0.08214
3.80000	3.93604	1.99656	0.01498	-0.05896
3.90000	4.13577	1.99779	0.01001	-0.04139
4.00000	4.33559	1.99861	0.00655	-0.02841
4.10000	4.53548	1.99901	0.00421	-0.01908
4.20000	4.73541	1.99915	0.00265	-0.01253
4.30000	4.93537	1.99969	0.00163	-0.00806
4.40000	5.13535	1.99982	0.00099	-0.00507
4.50000	5.33533	1.99989	0.00059	-0.00312
4.60000	5.53532	1.99994	0.00034	-0.00188
4.70000	5.73532	1.99996	0.00019	-0.00111
4.80000	5.93532	1.99998	0.00011	-0.00064
4.90000	6.13531	1.99999	0.00006	-0.00036
5.00000	6.33531	1.99999	0.00003	-0.00020
5.10000	6.53531	1.99999	0.00002	-0.00011
5.20000	6.73531	2.00000	0.00001	-0.00006
5.30000	6.93531	2.00000	0.00000	-0.00003
5.40000	7.13531	2.00000	0.00000	-0.00002
5.50000	7.33531	2.00000	0.00000	-0.00001

Table III (continued)/

Table III (continued)

$f(0) = -0.65$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.65000	0.00000	0.48268	0.31374
0.10000	-0.64753	0.04987	0.51505	0.33351
0.20000	-0.63991	0.10307	0.54932	0.35152
0.30000	-0.62680	0.15979	0.58526	0.36684
0.40000	-0.60783	0.22017	0.62256	0.37842
0.50000	-0.58264	0.28433		
0.60000	-0.55064	0.35234	0.66078	0.38523
0.70000	-0.51204	0.42419	0.73757	0.37767
0.80000	-0.46588	0.49981	0.77458	0.36086
0.90000	-0.41196	0.57903	0.80939	0.33344
1.00000	-0.34996	0.66158	0.84087	0.29427
1.10000	-0.27955	0.74706	0.86782	0.24260
1.20000	-0.20047	0.83495	0.88897	
1.30000	-0.11250	0.92462	0.90305	0.10159
1.40000	-0.01551	1.01529	0.90892	0.01410
1.50000	0.09056	1.10609	0.90559	-0.08201
1.60000	0.20568	1.19607	0.89234	-0.18354
1.70000	0.32972	1.28422	0.86883	-0.28647
1.80000	0.46243	1.36950	0.83515	
1.90000	0.60349	1.45093	0.79186	-0.47788
2.00000	0.75246	1.52759	0.74000	-0.55682
2.10000	0.90882	1.59869	0.68106	-0.61896
2.20000	1.07199	1.66362	0.61687	-0.66128
2.30000	1.24133	1.72196	0.54952	-0.68213
2.40000	1.41616	1.77349	0.48117	-0.68141
2.50000	1.59580	1.81823	0.41391	-0.66052
2.60000	1.77958	1.85637	0.34964	-0.62222
2.70000	1.96687	1.88831	0.28993	-0.57024
2.80000	2.15705	1.91455	0.23591	-0.50887
2.90000	2.34961	1.93571	0.18832	-0.44248
3.00000	2.54405	1.95214	0.14745	-0.37512

Table III (continued)/

Table III (continued)

$$f(0) = -0.65$$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	2.54405	1.95244	0.14745	-0.37512
3.10000	2.73997	1.96542	0.11322	-0.31021
3.20000	2.93703	1.97529	0.08524	-0.25036
3.30000	3.13494	1.98265	0.06292	-0.19726
3.40000	3.33349	1.98804	0.04554	-0.15180
3.50000	3.53250	1.99190	0.03231	-0.11413
3.60000	3.73139	1.99461	0.02247	-0.08385
3.70000		1.99648	0.01532	-0.06022
3.80000	4.13111	1.99774	0.01024	-0.04229
3.90000	4.33093	1.99858	0.00671	-0.02905
4.00000	4.53082	1.99912	0.00431	-0.01951
4.10000		1.99940	0.00271	-0.01283
4.20000	4.93070	1.99950	0.00167	-0.00825
4.30000	5.13068	1.99981	0.00101	-0.00519
4.40000	5.33067	1.99989	0.00060	-0.00320
4.50000	5.53066	1.99991	0.00035	-0.00193
4.60000	5.73065	1.99992	0.00020	-0.00114
4.70000	5.93065	1.99998	0.00011	-0.00066
4.80000	6.13065		0.00006	-0.00037
4.90000	6.33065	1.99999	0.00003	-0.00021
5.00000	6.53065	1.99999	0.00002	-0.00011
5.10000	6.73065	2.00000	0.00001	-0.00006
5.20000	6.93065	2.00000	0.00000	-0.00003
5.30000	7.13065	2.00000	0.00000	-0.00002
5.40000	7.33064	2.00000	0.00000	-0.00001
5.50000	7.53066	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$f(0) = -0.60$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.60000	0.00000	0.53948	0.32369
0.10000	-0.59725	0.05560	0.57279	0.34210
0.20000	-0.58877	0.11462	0.60782	0.35786
0.30000	-0.57421	0.17721	0.64424	0.36993
0.40000	-0.55320	0.24350	0.68164	0.37708
0.50000	-0.52538	0.31355	0.71945	0.37798
0.60000	-0.49037	0.38738	0.75698	
0.70000	-0.44778	0.46491	0.79338	0.37120 0.35526
0.80000	-0.39727	0.54598	0.82768	0.32881
0.90000	-0.33848	0.630%	0.85876	0.29067
1.00000	-0.27110	0.71759	0.88540	
1.10000	-0.19488	0.80723	0.90634	0.24003 0.17662
1.20000	-0.10960	0.89862	0.92031	0.10086
1.30000	-0.01512	0.99102	0.92614	0.01400
1.40000	0.08861	1.08354	0.92281	-0.08177
1.50000	0.20156	1.17525	0.90959	-0.18334
1.60000	0.32360	1.26512	0.88608	-0.28674
1.70000	0.45449	1.35212	0.85233	-0.38738
1.80000	0.59390	1.43526	0.80886	-0.48038
1.90000	0.74138	1.51360	0.75667	-0.56098
2.00000	0.89643	1.58635	0.69722	-0.62501
2.10000	1.05844	1.65287	0.63233	-0.66929
2.20000	1.22678	1.71270	0.56408	-0.69200
2.30000	1.40076	1.76567	0.49466	-0.69290
2.40000	1.57968	1.81167	0.42619	-0.67324
2.50000	1.76287	1.85098	0.36061	-0.63570
2.60000	1.94966	1.88394	0.29952	-0.58397
2.70000	2.13946	1.91107	0.24415	-0.52234
2.80000	2.33170	1.93298	0.19524	-0.45524
2.90000	2.52590	1.95035	0.15314	-0.38683
3.00000	2.72164	1.96384	0.11780	-0.32062

Table III (continued)/

Table III (continued)

$$f(0) = -0.60$$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	2.72166	1.96386	0.11780	-0.32062
3.10000	2.91857	1.97412	0.08886	-0.25934
3.20000	3.11638	1.98180	0.06571	-0.20479
3.30000	3.31486	1.98743	0.04765	-0.15794
3.40000	3.51381	1.99147	0.03387	-0.11900
3.50000	3.71311	1.99432	0.02360	-0.08762
3.60000	3.91265	1.99628	0.01612	-0.06307
3.70000	4.11235	1.99761	0.01079	-0.04438
3.80000	4.31216	1.99850	0.00708	-0.030~
3.90000	4.51206	1.99907	0.00456	-0.02056
4.00000	4.71196	1.99944	0.00257	-0.01354
4.10000	4.91192	1.99966	0.00178	-0.00873
4.20000	5.11189	1.99980	0.00108	-0.00551
4.30000	5.31188	1.99989	0.00064	-0.00340
4.40000	5.51187	1.999940	0.00037	-0.00205
4.50000	5.71187	1.999970	0.00021	-0.00122
4.60000	5.91186	1.99998	0.00012	-0.00070
4.70000	6.11186	1.99999	0.00007	-0.00040
4.80000	6.31186	2.00000	0.00004	-0.00022
4.90000	6.51186	2.00000	0.00002	-0.00012
5.00000	6.71186	2.00000	0.00001	400006
5.10000	6.91186	2.00000	0.00000	-0.00003
5.20000	7.11186	2.00000	0.00000	-0.00002
5.30000	7.31186	2.00000	0.00000	-0.00001
5.40000	7.51186	2.00000	0.00000	-0.00000
5.50000	7.71186	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = -0.55$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.55000	0.00000	0.59794	0.32887
0.10000	-0.54695	0.06147	0.63169	0.34550
0.20000	-0.53759	0.12639	0.66692	0.35853
0.30000	-0.52156	0.19489	0.70324	0.36678
0.40000	-0.49849	0.26705	0.74008	0.36892
0.50000	-0.46802	0.34290	0.77677	0.36355
0.60000	-0.42979	0.42237	0.81247	0.34920
0.70000	-0.38343	0.50533	0.84626	0.32449
0.80000	-0.32862	0.59153	0.87700	0.28820
0.90000	-0.26503	0.68059	0.90349	0.23945
1.00000	-0.19242	0.77204	0.92446	0.17788
1.10000	-0.11056	0.86526	0.93865	0.10378
1.20000	-0.01933	0.95950	0.94484	0.01827
1.30000	0.08134	1.05392	0.94198	-0.07662
1.40000	0.19143	1.14757	0.92930	-0.17789
1.50000	0.31080	1.23944	0.90632	-0.28168
1.60000	0.43922	1.32849	0.87303	-0.38345
1.70000	0.57637	1.41371	0.82986	-0.47831
1.80000	0.72180	1.49416	0.77776	-0.56139
1.90000	0.87501	1.56901	0.71812	-0.62837
2.00000	1.03540	1.63760	0.65274	-0.67584
2.10000	1.20231	1.69944	0.58367	-0.70176
2.20000	1.37505	1.75428	0.51313	-0.70558
2.30000	1.55293	1.80209	0.44326	-0.68836
2.40000	1.73524	1.84302	0.37608	-0.65258
2.50000	1.92132	1.87745	0.31325	-0.60185
2.60000	2.11053	1.90586	0.25606	-0.54043
2.70000	2.30231	1.92888	0.20537	-0.47282
2.80000	2.49615	1.94716	0.16157	-0.40329
2.90000	2.69161	1.96142	0.12465	-0.33552
3.00000	2.88832	1.97231	0.09431	-0.27239

Table III (continued)/

Table III (continued)

$f(0) = -0.55$

$\eta$	$f$	$f'$	$f''$	$f'''$
3.00000	2.88832	1.97231	0.09431	-0.27239
3.10000	3.08598	1.98048	0.06996	-0.21589
3.20000	3.28434	1.98648	0.05088	-0.16710
3.30000	3.48322	1.99080	0.03627	-0.12635
3.40000	3.68246	1.99386	0.02535	-0.09336
3.50000	3.88196	1.99597	0.01737	-0.06743
3.60000	4.08163	1.99740	0.01167	-0.04762
3.70000	4.28143	1.99836	0.00768	-0.03288
3.80000	4.48130	1.99898	0.00496	-0.02221
3.90000	4.68122	1.99938	0.00314	-0.01468
4.00000	4.88117	1.99963	0.00194	-0.00949
4.10000	5.08114	1.99978	0.00118	-0.00601
4.20000	5.28112	1.99988	0.00070	-0.00372
4.30000	5.48111	1.99993	0.00041	-0.00226
4.40000	5.68111	1.99996	0.00024	-0.00134
4.50000	5.88110	1.99998	0.00013	-0.00078
4.60000	6.08110	1.99999	0.00007	-0.00044
4.70000	6.28110	1.99999	0.00004	-0.00025
4.80000	6.48110	2.00000	0.00002	-0.00013
4.90000	6.68110	2.00000	0.00001	-0.00007
5.00000	6.88110	2.00000	0.00001	-0.00004
5.10000	7.08110	2.00000	0.00000	-0.00002
5.20000	7.28110	2.00000	0.00000	-0.00001
5.30000	7.48110	2.00000	0.00000	-0.00000
5.40000	7.68110	2.00000	0.00000	-0.00000
5.50000	7.88110	2.00000	0.00000	-0.00000

Table III (continued)/



Table III, (continued)

$$f(0) = -0.50$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.50000	0.00000	0.65796	0.32898
0.10000	-0.49665	0.06747	0.69162	<del>0.34350</del>
0.20000	-0.48639	0.13837	0.72651	0.35337
0.30000	-0.46886	0.21279	0.76210	0.35732
0.40000	<del>-0.44371</del>	0.29079	<del>0.79773</del>	<del>0.35396</del>
0.50000	-0.41059	<del>0.37231</del>	<del>0.83260</del>	0.34186
0.60000	<del>-0.36914</del>	0.45725	<del>0.86576</del>	<del>0.31959</del>
0.70000	<del>-0.31903</del>	<del>0.54537</del>	0.89614	0.28590
0.80000	<del>-0.25997</del>	<del>0.63634</del>	0.92253	<del>0.23983</del>
0.90000	-0.19168	<del>0.72970</del>	0.94367	0.18089
1.00000	-0.11397	0.82486	0.95828	0.10921
1.10000	-0.02667	0.92110	0.96512	<del>0.02574</del>
1.20000	0.07026	<del>1.01759</del>	0.96310	<del>-0.06767</del>
1.30000	0.17682	<del>1.11340</del>	<del>0.95135</del>	<del>-0.16822</del>
1.40000	0.29288	1.20752	<del>0.92934</del>	<del>-0.27219</del>
1.50000	0.41823	1.29892	<del>0.89694</del>	<del>-0.37513</del>
1.60000	0.55254	1.38657	<del>0.85451</del>	-0.47215
1.70000	<del>0.69539</del>	<del>1.46951</del>	0.80288	-0.55831
1.80000	<del>0.84626</del>	<del>1.54688</del>	0.74336	-0.62908
1.90000	1.00456	1.61798	<del>0.67770</del>	-0.68079
2.00000	1.16963	1.68228	0.60792	<del>-0.71104</del>
2.10000	<del>1.34078</del>	1.73950	0.53624	<del>-0.71897</del>
2.20000	1.51729	<del>1.78954</del>	<del>0.46485</del>	-0.70531
2.30000	<del>1.69845</del>	1.83255	0.39582	-0.67228
2.40000	1.88357	<del>1.86884</del>	<del>0.33093</del>	-0.62332
2.50000	2.07201	1.89891	0.27155	<del>-0.56265</del>
2.60000	2.26317	1.92337	0.21864	-0.49481
2.70000	2.45652	1.94287	0.17268	-0.42419
2.80000	2.65160	1.95814	<del>0.13376</del>	-0.35668
2.90000	2.84803	1.96985	0.10161	-0.28938
3.00000	<del>3.04548</del>	1.97866	0.07568	-0.23047

Table III (continued)/

Table III (continued)

$$f(0) = -0.50$$

$n$	$f$	$f'$	$f''$	$f'''$
3.00000	3.04548	1.97866	0.07568	-0.23047
3.10000	3.24369	1.98517	0.05526	-0.17925
3.20000	3.44245	1.98987	0.03956	-0.13618
3.30000	3.64162	1.99321	0.02776	-0.10110
3.40000	3.84106	1.99555	0.01910	-0.07336
3.50000	4.04070	1.99711	0.01288	-0.05204
3.60000	4.24046	1.99817	0.00851	-0.03610
3.70000	4.44032	1.99886	0.00552	-0.02450
3.80000	4.64023	1.99930	0.00350	-0.01626
3.90000	4.84017	1.99958	0.00218	-0.01056
4.00000	5.04014	1.99975	0.00133	-0.00671
4.10000	5.24012	1.99986	0.00080	-0.00418
4.20000	5.44011	1.99992	0.00047	-0.00254
4.30000	5.64010	1.99995	0.00027	-0.00152
4.40000	5.84010	1.99998	0.00015	-0.00089
4.50000	6.04010	1.99999	0.00008	-0.00051
4.60000	6.24010	1.99999	0.00005	-0.00028
4.70000	6.44010	2.00000	0.00002	-0.00016
4.80000	6.64010	2.00000	0.00001	-0.00008
4.90000	6.84010	2.00000	0.00001	-0.00004
5.00000	7.04010	2.00000	0.00000	-0.00002
5.10000	7.24010	2.00000	0.00000	-0.00001
5.20000	7.44010	2.00000	0.00000	-0.00001
5.30000	7.64010	2.00000	0.00000	-0.00000
5.40000	7.84010	2.00000	0.00000	-0.00000
5.50000	8.04010	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = -0.45$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.45000	0.00000	0.71946	0.32376
0.10000	-0.44635	0.07359	0.75248	0.33587
0.20000	-0.43517	0.15053	0.78644	0.34224
0.30000	-0.41613	0.23089	0.82070	0.34151
0.40000	-0.38888	0.31465	0.85446	0.33228
0.50000	-0.35309	0.40173	0.88682	0.31313
0.60000	-0.30843	0.58495	0.91671	0.28274
0.70000	-0.25461			0.24008
0.80000	-0.19136	0.68036	0.96430	0.18453
0.90000	-0.11847	0.77761	0.97943	0.11604
1.00000	-0.03580	0.87600	0.98710	0.03534
1.10000	0.05674	0.97474	0.98615	-0.05595
1.20000	0.15913	1.07291	0.97566	-0.15525
1.30000	0.27127		0.95495	-0.25905
1.40000	0.39295	1.16953	0.92382	-0.36302
1.50000	0.52386	1.35395	0.88250	-0.46230
1.60000	0.66358	1.61111	0.83169	-0.55189
1.70000	0.81162	1.94111		-0.62706
1.80000	0.96738	1.59403	0.77260	0.70600. 68383
1.90000	1.13020	1.66123	0.636%	-0.71942
2.00000	1.29939	1.72126	0.55376	-0.73254
2.10000	1.47421	1.77398	0.49078	-0.72351
2.20000	1.65394	1.81948	0.44973	-0.69421
2.30000	1.83787	1.85805	0.35250	-0.64786
2.40000	2.02534	1.89016	0.29060	-0.58855
2.50000	2.21571	1.91638	0.23508	-0.52086
2.60000	2.40844	1.93740	0.18655	-0.44930
2.70000	2.60304		0.14521	-0.37798
2.80000	2.79910	1.95393		-0.31025
2.90000	2.99627	1.96668	0.11084	-0.24857
3.00000	3.19428	1.98346	0.06088	-0.19446

Table III (continued)/

Table III (continued)

$f(0) = -0.45$

$n$	$f$	$f'$	$f''$	$f'''$
3.00000	3.19428	1.98346	0.06088	-0.19446
3.10000	3.39290	1.98866	0.04380	-0.14860
3.20000	3.59196	1.99236	0.03089	-0.11095
3.30000	3.79134	1.99495	0.02135	-0.08096
3.40000	3.99092	1.99672	0.01447	-0.05776
3.50000	4.19066	1.99791	0.00962	-0.04029
3.60000	4.39049	1.99869	0.00626	-0.02749
3.70000	4.59039	1.99920	0.00400	-0.01835
3.80000	4.79033	1.99951	0.00250	-0.01198
3.90000	4.99029	1.99971	0.00153	-0.00766
4.00000	5.19027	1.99983	0.00092	-0.00479
4.10000	5.39025	1.99991	0.00054	-0.00293
4.20000	5.59025	1.99995	0.00031	-0.00176
4.30000	5.79024	1.99997	0.00018	-0.00103
4.40000	5.99024	1.99998	0.00010	-0.00059
4.50000	6.19024	1.99999	0.00005	-0.00033
4.60000	6.39024	2.00000	0.00003	-0.00018
4.70000	6.59024	2.00000	0.00002	-0.00010
4.80000	6.79024	2.00000	0.00001	-0.00005
4.90000	6.99024	2.00000	0.00000	-0.00003
5.00000	7.19024	2.00000	0.00000	-0.00001
5.10000	7.39024	2.00000	0.00000	-0.00001
5.20000	7.59024	2.00000	0.00000	-0.00000
5.30000	7.79024	2.00000	0.00000	-0.00000
5.40000	7.99024	2.00000	0.00000	-0.00000
5.50000	8.19024	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = -0.40$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.40000	0.00000	0.78235	0.31294
0.10000	-0.39604	0.07982	0.81417	0.32244
0.20000	-0.38393	0.16286	0.84661	9.32504
0.30000	-0.36336	0.24914	0.87890	0.31936
0.40000	-0.33400	0.33860	0.91016	0.30399
0.50000	429553	0.43110	0.93934	0.27761
0.60000	-0.24768	0.52636	0.96527	0.24768
0.70000	-0.19018	0.62400	0.98672	0.28766
0.80000	-0.12282	0.72351	1.00237	0.12311
0.90000	-0.04544	0.82424	1.01092	0.04594
1.00000	0.04204	0.92542	1.01118	-0.04251
1.10000	0.13963	1.02617	1.00212	-0.13993
1.20000	0.24723	1.12551	0.98300	-0.24303
1.30000	0.36465	1.22242	0.94357	-0.34768
1.40000	0.49160	1.31585	0.86392	-0.44911
1.50000	0.62767	1.40481	0.80556	-0.62220 -0.54226
1.60000	0.77238	1.48835		
1.70000	0.92514	1.56568	0.74006	-0.68466
1.80000	1.08529	1.63618	0.66932	-0.72641
1.90000	1.25213	1.69944	0.59553	-0.74568
2.00000	1.42493	1.75526	0.52095	-0.74231
2.10000	1.60294	1.80368	0.44778	-0.71776
2.20000	1.78542	1.84493	0.37801	-0.67490
2.30000	1.97170	1.87945	0.31328	-0.61769
2.40000	2.16111	1.90780	0.25480	-0.55065
2.50000	2.35307	1.93064	0.20332	-0.47843
2.60000	2.54708	1.94870	0.15914	-0.40535
2.70000	2.74268	1.96271		-0.33505
2.80000	2.93951	1.97336	0.09195	-0.27029
2.90000	3.13726	1.98130	0.06786	-0.21290
3.00000	3.33570	1.98711	0.04910	-0.16378
3.10000	3.53463	1.99127	0.03483	
3.20000	3.73391	1.99419	0.02422	-0.12310
3.30000	3.93344	1.99621	0.01651	-0.06493
3.40000	4.13313	1.99757	0.01103	-0.04559
3.50000	4.33294	1.99847	0.00722	0.03130
3.60000	4.53281	1.99905	0.00464	-0.02102
3.70000	4.73274	1.99943	0.00292	-0.01382
3.80000	4.93270	1.99966	0.00180	-0.00888
3.90000	5.13267	1.99980	0.00109	-0.00559
4.00000	5.33265	1.99988	0.00065	-0.00344
4.10000	5.53264	1.99993	0.00038	-0.00208
4.20000	5.73264	1.99996	0.00021	-0.00123
4.30000	5.93264	1.99998	0.00012	-0.00071
4.40000	6.13264	1.99999	0.00007	-0.00040
4.50000	6.33263	1.99999	0.00004	-0.00022
4.60000	6.53263	2.00000	0.00002	-0.00012
4.70000	6.73263	2.00000	0.00001	-0.00006
4.80000	6.93263	2.00000	0.00000	-0.00003
4.90000	7.13263	2.00000	0.00000	-0.00002
5.00000	7.33263	2.00000	0.00000	-0.00001

Table III (continued)

$f(0) = -0.35$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.35000	0.00000	0.84657	0.29630
0.10000	-0.34572	0.08615	0.87660	0.30306
0.20000	-0.33267	0.17533	0.90691	0.30170
0.30000	-0.31055	0.26752	0.93663	0.29087
0.40000	-0.27907	0.36260	0.96673	0.26922
0.50000	-0.23794	0.46037	0.99007	0.23558
0.60000	-0.18692	0.56048	1.01141	0.18905
0.70000	-0.12578	0.66247	1.02744	0.12923
0.80000	-0.05438	0.76575	1.03682	0.05638
0.90000	0.02739	0.86958	1.03831	-0.02844
1.00000	0.11953	0.97311	1.03080	-0.12321
1.10000	0.22197	1.07541	1.01344	-0.22495
1.20000	0.33453	1.17545	0.98571	-0.32975
1.30000	0.45695	1.27220	0.94754	-0.43298
1.40000	0.58883	1.36463	0.89934	-0.52956
1.50000	0.72970	1.45176	0.84202	-0.61442
1.60000	0.87898	1.53277	0.77700	-0.68296
1.70000	1.03603	1.60697	0.70609	-0.73153
1.80000	1.20013	1.67386	0.63144	-0.75781
1.90000	1.37055	1.73320	0.55530	-0.76107
2.00000	1.54652	1.78695	0.47996	-0.74227
2.10000	1.72729	1.82929	0.40750	-0.70388
2.20000	1.91214	1.86661	0.33972	-0.64959
2.30000	2.10040	1.89744	0.27797	-0.58385
2.40000	2.29143	1.92243	0.22317	-0.51139
2.50000	2.48471	1.94232	0.17577	-0.43673
2.60000	2.67975	1.95783	0.13577	-0.36383
2.70000	2.87616	1.96971	0.10284	-0.29579
2.80000	3.07360	1.97862	0.07638	-0.23477
2.90000	3.27180	1.98517	0.05562	-0.18197
3.00000	3.47057	1.98990	0.03970	-0.13779
3.10000	3.66974	1.99325	0.02779	-0.10196
3.20000	3.86919	1.99556	0.01906	-0.07375
3.30000	4.06883	1.99714	0.01282	-0.05215
3.40000	4.26860	1.99819	0.00845	-0.03607
3.50000	4.46845	1.99887	0.00546	-0.02440
3.60000	4.66836	1.99931	0.00346	-0.01615
3.70000	4.86831	1.99959	0.00215	-0.01046
3.80000	5.06828	1.99976	0.00131	-0.00663
3.90000	5.26826	1.99986	0.00078	-0.00411
4.00000	5.46825	1.99992	0.00046	-0.00249
4.10000	5.66824	1.99996	0.00026	-0.00148
4.20000	5.86824	1.99998	0.00015	-0.00086
4.30000	6.06824	1.99999	0.00008	-0.00049
4.40000	6.26824	1.99999	0.00004	-0.00027
4.50000	6.46823	2.00000	0.00002	-0.00015
4.60000	6.66823	2.00000	0.00001	-0.00008
4.70000	6.86823	2.00000	0.00001	-0.00004
4.80000	7.06823	2.00000	0.00000	-0.00002
4.90000	7.26823	2.00000	0.00000	-0.00001
5.00000	7.46823	2.00000	0.00000	-0.00001

Table III (continued)

$$f(0) = -0.30$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.30000	0.00000	0.91205	0.27362
0.10000	-0.29539	0.09258	0.93968	0.27758
0.20000	-0.28139	0.18794	0.96726	0.27218
0.30000	-0.25772	0.28600	0.99376	0.25611
0.40000	-0.22411	0.38662	1.01808	0.22816
0.50000	-0.18032	0.48950	1.03897	0.18734
0.60000	-0.12614	0.59425	1.05510	0.13309
0.70000	-0.06142	0.70032	1.06514	0.06542
0.80000	0.01394	0.80703	1.06776	-0.01489
0.90000	0.09998	0.91358	1.06179	-0.10616
1.00000	0.19662	1.01907	1.04625	-0.20572
1.10000	0.30372	1.12249	1.02049	-0.30995
1.20000	0.42102	1.22282	0.98426	-0.41439
1.30000	0.54815	1.31900	0.93777	-0.51404
1.40000	0.68465	1.41006	0.88178	-0.60371
1.50000	0.82996	1.49508	0.81753	-0.67852
1.60000	0.98344	1.57334	0.74671	-0.73435
1.70000	1.14438	1.64427	0.67139	-0.76833
1.80000	1.31204	1.70754	0.59382	-0.77912
1.90000	1.48563	1.76304	0.51633	-0.76708
2.00000	1.66439	1.81089	0.44111	-0.73417
2.10000	1.84757	1.85140	0.37008	-0.60375
2.20000	2.03445	1.88509	0.30480	-0.62010
2.30000	2.22438	1.91259	0.24635	-0.54797
2.40000	2.41678	1.93461	0.19533	-0.47208
2.50000	2.61114	1.95191	0.15192	-0.39668
2.60000	2.80703	1.96524	0.11587	-0.32525
2.70000	3.00408	1.97531	0.08665	-0.26032
2.80000	3.20201	1.98277	0.06354	-0.20345
2.90000	3.40057	1.98819	0.04568	-0.15533
3.00000	3.59959	1.99188	0.03219	-0.11587
3.10000	3.79894	1.99475	0.02224	-0.08448
3.20000	3.99852	1.99659	0.01506	-0.06022
3.30000	4.19824	1.99783	0.01000	-0.04197
3.40000	4.39807	1.99864	0.00651	-0.02861
3.50000	4.59796	1.99917	0.00415	-0.01908
3.60000	4.79789	1.99950	0.00259	-0.01245
3.70000	4.99785	1.99970	0.00159	-0.00795
3.80000	5.19783	1.99983	0.00096	-0.00497
3.90000	5.39782	1.99990	0.00056	-0.00304
4.00000	5.59781	1.99995	0.00033	-0.00182
4.10000	5.79781	1.99997	0.00018	-0.00107
4.20000	5.99780	1.99998	0.00010	-0.00061
4.30000	6.19780	1.99999	0.00006	-0.00034
4.40000	6.39780	2.00000	0.00003	-0.00017
4.50000	6.59780	2.00000	0.00002	-0.00010
4.60000	6.79780	2.00000	0.00001	-0.00005
4.70000	6.99780	2.00000	0.00000	-0.00003
4.80000	7.19780	2.00000	0.00000	-0.00001
4.90000	7.39780	2.00000	0.00000	-0.00001
5.00000	7.59780	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = -0.25$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	-0.25000	0.00000	0.97873	0.24468
0.10000	-0.24507	0.09910	1.00334	0.24588
0.20000	-0.23010	0.20065	1.02755	0.23644
0.30000	-0.20486	0.30456	1.05023	0.21515
0.40000	-0.16911	0.41061	1.07015	0.18098
0.50000	-0.12267	0.51846	1.08597	0.13322
0.60000	-0.06538	0.62762	1.09633	0.07168
0.70000	0.08282	0.73749	1.09987	-0.00316
0.80000		0.84732	1.09530	-0.08995
0.90000	0.17231	0.95625	1.08155	-0.18636
1.00000	0.27331	1.06330	1.05782	-0.28911
1.10000	0.38487	1.16746	1.02366	-0.39398
1.20000	0.50667	1.26769	0.97911	-0.49609
1.30000	0.63825	1.36296	0.92471	-0.59019
1.40000	0.72849	1.45234	0.86151	-0.67117
1.50000	1.08582	1.53502		-0.73450
1.60000		1.61037	0.71532	-0.77671
1.70000	1.25031	1.67798	0.63650	-0.79582
1.80000	1.42115	1.73765	0.55694	-0.79150
1.90000	1.59757	1.78942	0.47893	-0.76513
2.00000	1.77878	1.83355	0.40455	-0.71961
2.10000	1.96404	1.87051	0.33552	-0.65897
2.20000	2.15266	1.90088	0.27311	-0.58791
2.30000	2.34402	1.92538	0.21812	-0.51129
2.40000	2.53757	1.94476	0.17089	-0.43364
2.50000	2.73283	1.95981	0.13130	-0.35883
2.60000	2.92941	1.97126	0.09893	-0.28981
2.70000	3.12699	1.97981	0.07309	-0.22854
2.80000	3.32530	1.98607	0.05294	-0.17603
2.90000	3.52414	1.99056	0.03759	-0.13246
3.00000	3.72337	1.99371	0.02616	-0.09742
3.10000	3.92285	1.99589	0.01785	-0.07003
3.20000	4.12252	1.99736	0.01194	-0.04923
3.30000	4.32231	1.99834	0.00783	-0.03384
3.40000	4.52218	1.99897	0.00503	-0.02276
3.50000	4.72210	1.99938		
3.60000	4.92205	1.99963	0.00317	-0.01497
3.70000	5.12202	1.99978	0.00199	-0.00607
3.80000	5.32200	1.99987	0.00070	-0.00374
3.90000	5.52199	1.99993	0.00041	-0.00226
4.00000	5.72199	1.99996	0.00023	-0.00134
4.10000	5.92198	1.99998	0.00013	-0.00077
4.20000	6.12198	1.99999	0.00007	-0.00044
4.30000	6.32198		0.00004	-0.00024
4.40000	6.52198	2.00000	0.00002	-0.00013
4.50000	6.72198	2.00000	0.00001	0.00007
4.60000	6.92198	2.00000	0.00001	-0.00004
4.70000	7.12198	2.00000	0.00000	-0.00002
4.80000	7.32198	2.00000	0.00000	-0.00001
4.90000	7.52198	2.00000	0.00000	-0.00000
5.00000	7.72198	2.00000	0.00000	-0.00000



Table III (continued)

$$f(0) = -0.20$$

$n$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.20000	0.00000	1.04655	0.20931
0.10000	-0.19473	0.10570	1.06750	0.20788
0.20000	-0.17879	0.21348	1.08796	0.19447
0.30000	-0.15197	0.32318	1.10792	0.16808
0.40000	-0.11410	0.43656	1.12088	0.12789
0.50000	-0.06502	0.54720	1.13107	0.073%
0.60000	-0.00463	0.66057	1.13512	0.00526
0.70000	0.06710	0.77398	1.13169	-0.07593
0.80000	0.15014	0.88662	1.12069	-0.16809
0.90000	0.24436	0.99757	1.09780	-0.26826
1.00000	0.34956	1.10583	1.06578	-0.37255
1.10000	0.46541	1.21037	1.02331	-0.47626
1.20000	0.59148	1.31016	0.97072	-0.57416
1.30000	0.72725	1.40421	0.90885	-0.66096
1.40000	0.87210	1.49166	0.83906	-0.73175
1.50000	1.02534	1.57182	0.76317	-0.78251
1.60000	1.18620	1.64416	0.68332	-0.81056
1.70000	1.35390	1.70843	0.60185	-0.81485
1.80000	1.52762	1.76456	0.52112	-0.79608
1.90000	1.70655	1.81275	0.44333	-0.75657
2.00000	1.88992	1.85339	0.37038	-0.69999
2.10000	2.07699	1.88704	0.30375	-0.63089
2.20000	2.26711	1.91438	0.24446	-0.55421
2.30000	2.45968	1.93619	0.19301	-0.47474
2.40000	2.65419	1.95325	0.14946	-0.39671
2.50000	2.85020	1.96633	0.11351	-0.32352
2.60000	3.04735	1.97618	0.08452	-0.25757
2.70000	3.24535	1.98344	0.06171	-0.20027
2.80000	3.44397	1.98870	0.04417	-0.15211
2.90000	3.64304	1.99242	0.03099	-0.11290
3.00000	3.84242	1.99501	0.02132	-0.08191
3.10000	4.04202	1.99677	0.01437	-0.05810
3.20000	4.24176	1.99795	0.00950	-0.04030
3.30000	4.44159	1.99872	0.00616	0.00000
3.40000	4.64149	1.99922	0.00391	-0.01815
3.50000	4.84143	1.99953	0.00243	-0.01179
3.60000	5.04139	1.99972	0.00149	-0.00749
3.70000	5.24137	1.99984	0.00089	-0.00466
3.80000	5.44136	1.99991	0.00052	-0.00284
3.90000	5.64135	1.99995	0.00030	-0.00169
4.00000	5.84135	1.99997	0.00017	-0.00099
4.10000	6.04135	1.99998	0.00009	-0.00056
4.20000	6.24135	1.99999	0.00005	-0.00032
4.30000	6.44135	2.00000	0.00003	-0.00017
4.40000	6.64135	2.00000	0.00001	-0.00009
4.50000	6.84135	2.00000	0.00001	0.00005
4.60000	7.04135	2.00000	0.00000	-0.00003
4.70000	7.24135	2.00000	0.00000	-0.00001
4.80000	7.44134	2.00000	0.00000	-0.00001
4.90000	7.64134	2.00000	0.00000	-0.00000
5.00000	7.84134	2.00000	0.00000	-0.00000

Table III (continued)

$f(0) = -0.15$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	-0.15000	0.00000	1.11546	0.16732
0.10000	-0.14439	0.11238	1.13210	0.16347
0.20000	-0.12747	0.22639	1.14771	0.14630
0.30000	-0.09907	0.34184	1.16089	0.11501
0.40000	-0.05906	0.45844	1.17022	0.06912
0.50000	-0.00736	0.57571	1.17423	0.00864
0.60000	0.05608	0.69306	1.17149	-0.06570
0.70000	0.13123	0.80974	1.16068	-0.15232
0.80000	0.21798	0.92489	1.14070	-0.24865
0.90000	0.31612	1.03754	1.11074	-0.35113
1.00000	0.42537	1.14669	1.07041	-0.45532
1.10000	0.54531	1.25128	1.01979	-0.55610
1.20000	0.67544	1.35032	0.95949	-0.64808
1.30000	0.81516	1.44289	0.89064	-0.72602
1.40000	0.96378	1.52822	0.83490	-0.78539
1.50000	1.12054	1.60571		-0.82282
1.60000	1.28465	1.67499	0.65114	-0.83648
1.70000	1.45526	1.73593	0.56780	-0.82630
1.80000	1.63156	1.78863	0.48662	-0.79394
1.90000	1.81272	1.83340	0.40965	-0.74258
2.00000	1.99799	1.87075	0.33859	-0.67651
2.10000	2.18665	1.90135	0.27468	-0.60062
2.20000	2.37806	1.92595	0.21863	-0.51992
2.30000	2.57167	1.94535	0.17070	-0.43899
2.40000	2.76699	1.96035	0.13072	-0.36169
2.50000	2.96362	1.97174	0.09815	-0.29089
2.60000	3.16124	1.98021	0.07226	-0.22844
2.70000	3.35958	1.98638	0.05216	-0.17524
2.80000	3.55846	1.99080	0.03691	-0.13134
2.90000	3.75770	1.99390	0.02560	-0.09621
3.00000	3.95720	1.99602	0.01741	-0.04824
3.10000	4.15688	1.99746	0.01161	-0.03304
3.20000	4.35668	1.99840	0.00758	-0.02213
3.30000	4.55655	1.99902		
3.40000	4.75647	1.99940	0.00305	-0.01451
3.50000	4.95643	1.99965	0.00188	-0.00931
3.60000	5.15640	1.99979	0.00113	-0.00584
3.70000	5.35638	1.99988	0.00067	-0.00359
3.80000	5.55637	1.99993	0.00039	-0.00216
3.90000	5.75637	1.99996	0.00022	-0.00127
4.00000	5.95637	1.99998	0.00012	-0.00073
4.10000	6.15637	1.99999	0.00007	-0.00041
4.20000	6.35636	1.99999	0.00004	-0.00023
4.30~0	6.55636	2.00000	0.00002	-0.00012
4.40000	6.75636	2.00000	0.00001	-0.00007
4.50000	6.95636	2.00000	0.00000	-0.00003
4.60000	7.15636	2.00000	0.00000	-0.00002
4.70000	7.35636	2.00000	0.00000	-0.00001
4.80000	7.55636	2.00000	0.00000	-0.00000
4.90000	7.75636	2.00000	0.00000	-0.00000
5.00000	7.95636	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = -0.10$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	-0.10000	0.00000	1.18540	0.11854
0.10000	-0.09405	0.11913	1.19708	0.11259
0.20000	-0.07614	0.23937	1.20743	0.09193
0.30000	-0.04615	0.36052	1.21496	0.05607
0.40000	-0.00401	0.48222	1.21813	0.00489
0.50000	0.05030	0.60395	1.21544	-0.06113
0.60000	0.11676	0.72506	1.20545	-0.14074
0.70000	0.19526	0.84476	1.18691	-0.23176
0.80000	0.28563	0.96213	1.15883	-0.33100
0.90000	0.38758	1.07618	1.12058	-0.43431
1.00000	0.50072	1.18590	1.07199	-0.53677
1.10000	0.62458	1.29025	1.01343	-0.63297
1.20000	0.75856	1.38828	0.94579	-0.71744
1.30000	0.90200	1.47915	0.87050	-0.78519
1.40000	1.05413	1.56219	0.78945	-0.83218
1.50000	1.21416	1.63692	0.70485	-0.85579
1.60000	1.38123	1.70312	0.61910	-0.85512
1.70000	1.55450	a.76078	0.53461	-0.83104
1.80000	1.73311	1.81015	0.45359	-0.78672
1.90000	1.91627	1.85168	0.37795	-0.72425
2.00000	2.10321	1.88597	0.30915	-0.65020
2.10000	2.29324	1.91377	0.24815	-0.56906
2.20000	2.48577	1.93588	0.19541	-0.48574
2.30000	2.68026	1.95313	0.15093	-0.40453
2.40000	2.87626	1.96632	0.11432	-0.32882
2.50000	3.07341	1.97623	0.08491	-0.26096
2.60000	3.27142	1.98352	0.06183	-0.20227
2.70000	3.47005	1.98877	0.04414	-0.15317
2.80000	3.66912	1.99249	0.03089	-0.11334
2.90000	3.86851	1.99507	0.02119	-0.08199
3.00000	4.06811	1.99641	0.01425	-0.05798
3.10000	4.26785	1.99745	0.00940	-0.04010
3.20000	4.46769	1.99815	0.00607	-0.02713
3.30000	4.66760	1.99854	0.00385	-0.01795
3.40000	4.86754	1.99954	0.00239	-0.01163
3.50000	5.06750	1.99973	0.00145	-0.00737
3.60000	5.26748	1.99985	0.00087	-0.00457
3.70000	5.46747	1.99991	0.00051	-0.00278
3.80000	5.66746	1.99995	0.00029	-0.00165
3.90000	5.86746	1.99997	0.00016	-0.00096
4.00000	6.06746	1.99999	0.00009	-0.00055
4.10000	6.26745	1.99999	0.00005	-0.00031
4.20000	6.46745	2.00000	0.00003	-0.00017
4.30000	6.66745	2.00000	0.00001	-0.00009
4.40000	6.86745	2.00000	0.00001	-0.00005
4.50000	7.06745	2.00000	0.00000	-0.00002
4.60000	7.26745	2.00000	0.00000	-0.00001
4.70000	7.46745	2.00000	0.00000	-0.00001
4.80000	7.66745	2.00000	0.00000	-0.00000
4.90000	7.86745	2.00000	0.00000	-0.00000
5.00000	8.06745	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = -0.05$$

$h$	$f$	$f'$	$f''$	$f'''$
0.0000	-0.05000		1.25634	0.06282
0.10000	-0.04371	0.12594	1.26238	0.05518
0.20000	-0.02479	0.25242	1.26684	0.03141
0.30000	0.00679	0.37920	1.26812	-0.00861
0.40000	0.05104	0.50589	1.26459	-0.06455
0.50000	0.10794	0.63191	1.25471	-0.13544
0.60000	0.17738	0.75657	1.23706	-0.21943
0.70000	0.25918	0.87902	1.21048	-0.31374
0.80000	0.35308	0.99834	1.17410	-0.41455
0.90000	0.45871	1.11350	1.12750	-0.51720
1.00000	0.57561	1.22350	1.07077	-0.61635
1.10000	0.70321	1.32734	1.00454	-0.70640
1.20000	0.84084	1.42413	0.92998	-0.78197
1.30000	0.98777	1.51311	0.84878	-0.83841
1.40000	1.14319	1.59507	0.76305	-0.87231
1.50000	1.30701	1.67287	0.58749 0.67514	-0.88188
1.60000	1.47705			-0.86715
1.70000	1.65169	1.78323	0.50246	-0.82991
1.80000	1.83239	1.82942	0.42215	-0.77354
1.90000	2.01732	1.86788	0.34824	-0.70252
2.00000	2.20574	1.89932	0.28196	-0.62194
2.10000	2.39698	1.92455	0.22401	-0.53694
2.20000	2.59047	1.94440	0.17457	-0.45222
2.30000	2.78571	1.95974	0.13343	-0.37168
2.40000	2.98229	1.97135	0.10000	-0.29823
2.50000	3.17988	1.97997	0.07349	-0.23368
2.60000	3.37821	1.98624	0.05294	-0.17886
2.70000	3.57707	1.99072	0.03740	-0.13376
2.80000	3.77631	1.99385	0.02589	-0.09778
2.90000	3.97581	1.99600	0.01757	-0.06987
3.00000	4.17548	1.99745	0.01169	-0.04883
3.10000	4.37528	1.99840	0.00763	-0.03337
3.20000	4.57515	1.99902	0.00488	-0.02231
3.30000	4.77508	1.99941	0.00306	-0.01459
3.40000	4.97503	1.99965	0.00188	-0.00934
3.50000	5.17500	1.99980	0.00113	-0.00585
3.60000	5.37499	1.99988	0.00067	-0.00359
3.70000	5.57498	1.99994	0.00039	-0.00215
3.80000	5.77497			-0.00127
3.90000	5.97497	1.99997	0.00022	-0.00073
		1.99998		
4.00000	6.17497	1.99999	0.00007	-0.0001
4.10000	6.37497	2.00000	0.00004	-0.00023
4.20000	6.57497	2.00000	0.00002	-0.00012
4.30000	6.77497	2.00000	0.00001	-0.00006
4.40000	6.97497	2.00000	0.00000	"0.00003
4.50000	7.17497	2.00000	0.00000	"0.00002
4.60000	7.37497	2.00000	0.00000	-0.00001
4.70000	7.57497	2.00000	0.00000	"0.00000
4.80000	7.77497	2.00000	0.00000	-0.00000
4.90000	7.97497	2.00000	0.00000	-0.00000
5.00000	a.17497	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = 0.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0.00000	0.00000	1.32823	0.00000
0.10000	0.00664	0.13282	1.32794	-0.00882
0.20000	0.02656	0.26553	1.32588	-0.03522
0.30000	0.05974	0.39788	1.32032	-0.07887
0.40000	0.10611	0.52942	1.30956	-0.13896
0.50000	0.16557	0.65956	1.29203	-0.21393
0.60000	0.23795	0.78755	1.26636	-0.30133
0.70000	0.32298	0.91252	1.23146	-0.39774
0.80000	0.42032	1.03352	1.18666	-0.49878
0.90000	0.52952	1.14952	1.13173	-0.59927
1.00000	0.65003	1.25953	1.06701	-0.69358
1.10000	0.78120	1.36262	0.99341	-0.77604
1.20000	0.92229	1.45797	0.91237	-0.84147
1.30000	1.07251	1.54491	0.82582	-0.88570
1.40000	1.23098	1.62302	0.73603	-0.90604
1.50000	1.39681	1.69209	0.64544	-0.90156
1.60000	1.56910	1.75216	0.55651	-0.87322
1.70000	1.74695	1.80352	0.47151	-0.82370
1.80000	1.92953	1.84666	0.39235	-0.75705
1.90000	2.11603	1.86224	0.32051	-0.67820
2.00000	2.30575	1.91104	0.25694	-0.59244
2.10000	2.49804	1.93391	0.20208	-0.50481
2.20000	2.69237	1.95174	0.15590	-0.41973
2.30000	2.88825	1.96537	0.11794	-0.34064
2.40000	3.08533	1.97558	0.08749	-0.26994
2.50000	3.28328	1.98308	0.06363	-0.20893
2.60000	3.48187	1.98849	0.04537	-0.15799
2.70000	3.68093	1.99231	0.03172	-0.11675
2.80000	3.88030	1.99496	0.02173	-0.08434
2.90000	4.07989	1.99675	0.01460	-0.05957
3.00000	4.27963	1.99795	0.00961	-0.04114
3.10000	4.47946	1.99873	0.00621	-0.02780
3.20000	4.67936	1.99922	0.00393	-0.01837
3.30000	4.87930	1.99954	0.00244	-0.01188
3.40000	5.07927	1.99973	0.00148	-0.00752
3.50000	5.27925	1.99984	0.00088	-0.00466
3.60000	5.47923	1.99991	0.00052	-0.00283
3.70000	5.67923	1.99995	0.00030	-0.00168
3.80000	5.87922	1.99997	0.00017	-0.00098
3.90000	6.07922	1.99999	0.00009	-0.00056
4.00000	6.27922	1.99999	0.00005	-0.00031
4.10000	6.47922	2.00000	0.00003	-0.00017
4.20000	6.67922	2.00000	0.00001	-0.00009
4.30000	6.87922	2.00000	0.00001	-0.00005
4.40000	7.07922	2.00000	0.00000	-0.00002
4.50000	7.27922	2.00000	0.00000	-0.00001
4.60000	7.47922	2.00000	0.00000	-0.00001
4.70000	7.67922	2.00000	0.00000	-0.00000
4.80000	7.87922	2.00000	0.00000	-0.00000
4.90000	8.07922	2.00000	0.00000	-0.00000
5.00000	8.27922	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = 0.05$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	0.05000	0.00000	1.39372	-0.07005
0.10000	0.05699	0.13974	1.38451	-0.10788 -0.07943
0.20000	0.07792	0.27868	1.37153	-0.15456
0.30000	0.11269	0.41652	1.35303	-0.21807
0.40000	0.16118	0.55280	1.32743	-0.29626
0.50000	0.22318	0.68689	1.29339	-0.38502
0.60000	0.29845	0.81800	1.24997	-0.48331 -0.58318
0.70000	0.38665	0.94525	1.19665	-0.68005
0.80000	0.48734	1.06767	1.13343	-0.76808
0.90000	0.59999	1.18425	1.06093	-0.84163
1.00000	0.72397	1.29404	0.98030	-0.89586
1.10000	0.85855	1.39617	0.89325	-0.92717
1.20000	1.00292	1.48989	0.80190	-0.93367
1.30000	1.15623	1.57467	0.70864	-0.91534
1.40000	1.31755	1.65020	0.61599	-0.87401
1.50000	1.48596	1.71642	0.52635	-0.81315
1.60000	1.66053	1.77350	0.44184	-0.73740
1.70000	1.84037	1.82186	0.36421	-0.65201
1.80000	2.02463	1.86210	0.29469	-0.56230
1.90000	2.21254	1.89497	0.23396	-0.47314
2.00000	2.40341	1.92133	0.18221	-0.38855
2.10000	2.59662	1.94207	0.13918	-0.31152
2.20000	2.79166	1.95806	0.10425	-0.24392
2.30000	2.98010	1.97017	0.07657	-0.18656
2.40000	3.18559	1.97915	0.05513	-0.13944
2.50000	3.38385	1.98569	0.03898	-0.10186
2.60000	3.58267	1.99035	0.02898	-0.07274
2.70000	3.78188	1.99361	0.01847	-0.05080
2.80000	3.98136	1.99585	0.00792	-0.03470
2.90000	4.18102	1.99735	0.00506	-0.02318
3.00000	4.38081	1.99834	0.00317	-0.01515
3.10000	4.58063	1.99898	0.00195	-0.00969
3.20000	4.78060	1.99939	0.00117	-0.00607
3.30000	4.98055	1.99964	0.00069	-0.00372
3.40000	5.18053	1.99979	0.00040	-0.00223
3.50000	5.38051	1.99988	0.00023	-0.00131
3.60000	5.58050	1.99993	0.00013	-0.00075
3.70000	5.78050	1.99996	0.00007	-0.00042
3.80000	5.98049	1.99998	0.00004	-0.00023
3.90000	6.18049	1.99999	0.00002	-0.00013
4.00000	6.38049	2.00000	0.00001	-0.00007
4.10000	6.58049	2.00000	0.00000	-0.00003
4.20000	6.78049	2.00000	0.00000	-0.00001
4.30000	6.98049	2.00000	0.00000	0.00000
4.40000	7.18049	2.00000	0.00000	0.00000
4.50000	7.38049	2.00000	0.00000	0.00000

**Table III** (continued)

$$f(0) = 0.10$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0.10000	0.00000	1.47469	-0.14747
0.10000	0.10735	0.14673	1.45966	-0.15669
0.20000	0.12929	0.29187	1.44267	-0.18653
0.30000	0.16566	0.43513	1.42172	-0.23552
0.40000	0.21624	0.57602	1.39499	-0.30165
0.50000	0.28076	0.71388	1.36091	-0.38209
0.60000	0.35889	0.84791	1.31822	-0.47309
0.70000	0.45019	0.97721	1.26609	-0.56998
0.80000	0.55414	1.10080	1.20421	-0.66730
0.90000	0.67013	1.21773	1.13282	-0.75913
1.00000	0.79743	1.32708	1.05276	-0.83951
1.10000	0.93526	1.42804	0.96548	-0.90238
1.20000	1.08274	1.51999	0.87288	-0.94511
1.30000	1.23895	1.60252	0.77727	-0.96299
1.40000	1.40292	1.67543	0.68113	-0.95557
1.50000	1.57371	1.73881	0.58697	-0.92373
1.60000	1.75038	1.79297	0.49711	-0.87014
1.70000	1.93202	1.83844	0.41353	-0.79895
1.80000	2.11780			-0.71527
1.90000	2.30697	1.87593	0.33774	-0.62454
2.00000	2.49885	1.90628	0.27072	
2.10000	2.69287	1.93038	0.21290	-0.53200
2.20000	2.88853	1.94916	0.16423	-0.44224
2.30000	3.08545	1.96352	0.12424	-0.35887
2.40000	3.28330	1.97427		-0.28436
2.50000	3.48181	1.98218	0.09216	0.06700 22008
2.60000	3.68082	1.98788	0.04780	-0.16642
2.70000	3.88015	1.99190	0.03341	-0.12298
2.80000	4.07972	1.99469	0.02290	-0.08884
2.90000	4.27945	1.99658	0.01538	-0.06275
3.00000	4.47928	1.99784	0.01013	-0.04334
3.10000	4.67917	1.99866	0.00654	-0.02928
3.20000	4.87911	1.99918	0.00414	-0.01935
3.30000	5.07907	1.99951	0.00257	-0.01252
3.40000	5.27905	1.99971	0.00156	-0.00792
3.50000	5.47905	1.99984	0.00093	-0.00491
3.60000	5.67903	1.99991	0.00061	-0.00298
3.70000	5.87902	1.99995	0.00031	-0.00177
3.80000	6.07902	1.99997	0.00017	-0.00101
3.90000	6.27902	1.99999	0.00010	-0.00058
4.00000	6.47902	1.99999	0.00005	-0.00033
4.10000	6.67902	2.00000	0.00003	-0.00018
4.20000	6.87902	2.00000	0.00001	-0.00010
4.30000	7.07902	2.00000	0.00001	-0.00005
4.40000	7.27902	2.00000	0.00000	-0.00003
4.50000	7.47902	2.00000	0.00000	-0.00001
4.60000	7.67902	2.00000	0.00000	-0.00001

Table III (continued)

$$f(0) = 0.15$$

$\eta$	$f$	$f'$	$f''$	$f'''$	$t$
0.0000	0.15000	0.00000	1.54919	-0.23238	
0.10000	0.15771	0.15375	1.52573	-0.24062	
0.20000	0.18067	0.30508	1.50032	-0.27106	
0.30000	0.21863	0.45368	1.47085	-0.32158	
0.40000	0.27130	0.59905	1.43543	-0.38943	
0.50000	0.33831	0.74052	1.39250	-0.47110	
0.60000	0.41925	0.87726	1.34090	-0.56217	
0.70000	0.51358	1.00838	1.27993	-0.65735	
0.80000	0.62070	1.13293	1.20949	-0.75073	
0.90000	0.73992	1.24998	1.13005	-0.83614	
1.00000	0.87042	1.35868	1.04272	-0.90761	
1.10000	1.01135	1.45832	0.94917	-0.95994	
1.20000	1.16176	1.54837	0.85151	-0.98925	
1.30000	1.32069	1.62856	0.75216	-0.99337	
1.40000	1.48715	1.69883	0.65360	-0.97212	
1.50000	1.66014	1.75941	0.55853	-0.92723	
1.60000	1.83872	1.81072	0.46891	-0.86219	
1.70000	2.02200	1.85343	0.38661	-0.78172	
1.80000	2.20915	1.88833	0.31290	-0.69124	
1.90000	2.39943	1.91632	0.24851	-0.59629	
2.00000	2.59221	1.93835	0.19363	-0.50192	
2.10000	2.70694	1.95500	0.14797	-0.41238	
2.20000	2.98315	1.96725	0.11089	-0.33080	
2.30000	3.18047	1.97779	0.08148	-0.25915	
2.40000	3.37862	1.98474	0.05870	-0.19833	
2.50000	3.57735	1.98971	0.04146	-0.14832	
2.60000	3.77651	1.99318	0.02871	-0.10841	
2.70000	3.97595	1.99557	0.01948	-0.07747	
2.80000	4.17560	1.99717	0.01296	-0.05413	
2.90000	4.37537	1.99823	0.00846	-0.03699	
3.00000	4.57523	1.99891	0.00541	-0.02473	
3.10000	4.77514	1.99934	0.00339	-0.01618	
3.20000	4.97509	1.99961	0.00208	-0.01036	
3.30000	5.17506	1.99977	0.00125	-0.00649	
3.40000	5.37505	1.99987	0.00074	-0.00398	
3.50000	5.57504	1.99993	0.00043	-0.00239	
3.60000	5.77503	1.99996	0.00024	-0.00140	
3.70000	5.97503	1.99998	0.00014	-0.00081	
3.80000	6.17503	1.99999	0.00007	-0.00046	
3.90000	6.37502	1.99999	0.00004	-0.00025	
4.00000	6.57502	2.00000	0.00002	-0.00014	
4.10000	6.77502	2.00000	0.00001	-0.00007	
4.20000	6.97502	2.00000	0.00001	-0.00004	
4.30000	7.17502	2.00000	0.00000	-0.00002	
4.40000	7.37502	2.00000	0.00000	-0.00001	
4.50000	7.57502	2.00000	0.00000	-0.00000	
4.60000	7.77502	2.00000	0.00000	-0.00000	
4.70000	7.97502	2.00000	0.00000	-0.00000	
4.80000	8.17502	2.00000	0.00000	400000	
4.90000	8.37502	2.00000	0.00000	400000	
5.00000	8.57502	2.00000	0.00000	-0.00000	



Table III (continued)

$$f(0) = 0.20$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0.20000	0.00000	1.62448	-0.32490
0.10000	0.20007	0.16082	1.59189	-0.33122
0.20000	0.23205	0.31832	1.55744	-0.36141
0.30000	0.27161	0.4721a	1.51891	-0.41255
0.40000	0.32635	0.62190	1.47435	-0.48116
0.50000	0.39583	0.76679	1.42223	-0.56296
0.60000	0.47952	0.90605	1.36149	-0.65286
0.70000	0.57682	1.03878	1.29159	-0.74502
0.80000	0.68703	1.16407	1.21262	-0.83311
0.90000	0.80936	1.28103	1.12531	-0.91078
1.00000	0.94293	1.38890	1.0-101	-0.97217
1.10000	1.08682	1.48706	0.93153	-1.01246
1.20000	1.24001	1.57512	0.82933	-0.02838
1.30000	1.40150	1.65291	0.72677	-0.01857
1.40000	1.57025	1.72055	0.62646	-0.98370
1.50000	1.74528	1.77836	0.53078	-0.92636
1.60000	1.92562	1.82693	0.44180	-0.85073
1.70000	2.11038	1.86699	0.36108	-0.76201
1.80000	2.29876	1.89945	0.28965	-0.66583
1.90000	2.49005	1.92525	0.22798	-0.56768
2.00000	2.68362	1.94537	0.17602	-0.47237
2.10000	2.87897	1.96076	0.13329	-0.38373
2.20000	3.07565	1.97230	0.09897	-0.30439
2.30000	3.27333	1.98060	0.07205	-0.23585
2.40000	3.47173	1.98692	0.05143	-0.17855
2.50000	3.67065	1.99125	0.03599	-0.13209
2.60000	3.86994	1.99426	0.02469	-0.09553
2.70000	4.06947	1.99630	0.01660	-0.06755
2.80000	4.26917	1.99766	0.01094	-0.04671
2.90000	4.46899	1.99854	0.00707	-0.03160
3.00000	4.66887	1.99911	0.00448	-0.02091
3.10000	4.86880	1.99947	0.00278	-0.01354
3.20000	5.06876	1.99969	0.00169	-0.00858
3.30000	5.26874	1.99982	0.00101	-0.00532
3.40000	5.46872	1.99990	0.00059	-0.00323
3.50000	5.66872	1.99994	0.00034	-0.00192
3.60000	5.86871	1.99997	0.00019	-0.00112'
3.70000	6.06871	1.99998	0.00010	-0.00064
3.80000	6.26871	1.99999	0.00006	-0.00036
3.90000	6.46871	2.00000	0.00003	-0.0001 y
4.00000	6.66871	2.00000	0.00002	-0.00010
4.10000	6.86871	2.00000	0.00001	-0.00005
4.20000	7.06871	2.00000	0.00000	-0.00003
4.30000	7.26871	2.00000	0.00000	-0.00001
4.40000	7.46871	2.00000	0.00000	-0.00001
4.50000	7.66871	2.00000	0.00000	-0.00000

Table III (continued) /

Table III (continued)

$f(0) = 0.35$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	0.35000	0.00000	1.85484	-0.64919
0.10000	0.35917	0.18226	1.79049	-0.64309
0.20000	0.38624	0.35807	1.72524	-0.66635
0.30000	0.43056	0.52719	1.65643	-0.71319
0.40000	0.49144	0.68917	1.58202	-0.77747
0.50000	0.56813	0.84336	1.50058	-0.85253
0.60000	0.65983	0.98902	1.41139	-0.93127
0.70000	0.76563	1.12538	1.31445	-1.00638
0.80000	0.88457	1.25168	1.21048	-1.07075
0.90000	1.01561	1.36728	1.10087	-1.11805
1.00000	1.15765	1.47173	0.98760	-1.14330
1.10000	1.30957	1.56476	0.87305	-1.14333
1.20000	1.47022	1.64638	0.75982	-1.11710
1.30000	1.63848	1.71685	0.65047	-1.06579
1.40000	1.81324	1.77668	0.54739	-0.99256
1.50000	1.99348	1.82661	0.45254	-0.90213
1.60000	2.17826	1.86751	0.36735	-0.80019
1.70000	2.36672	1.90043	0.29269	-0.69271
1.80000	2.55811	1.92641	0.22881	-0.58533
1.90000	2.75181	1.94654	0.17546	-0.48284
2.00000	2.94726	1.96183	0.13196	-0.38893
2.10000	3.14404	1.97323	0.09732	-0.30597
2.20000	3.34181	1.98155	0.07037	-0.23516
2.30000	3.54028	1.98751	0.04988	-0.17660
2.40000	3.73925	1.99170	0.03467	-0.12963
2.50000	3.93857	1.99458	0.02362	-0.09302
2.60000	4.13814	1.99653	0.01577	-0.06527
2.70000	4.33786	1.99782	0.01033	-0.04479
2.80000	4.53768	1.99865	0.00663	-0.03007
2.90000	4.73758	1.99918	0.00417	-0.01975
3.00000	4.93751	1.99951	0.00257	-0.01269
3.10000	5.13748	1.99972	0.00155	-0.00798
3.20000	5.33745	1.99984	0.00092	-0.00492
3.30000	5.53744	1.99991	0.00053	-0.00296
3.40000	5.73743	1.99995	0.00030	-0.00175
3.50000	5.93743	1.99997	0.00017	-0.00101
3.60000	6.13743	1.99998	0.00009	-0.00057
3.70000	6.33743	1.99999	0.00005	-0.00032
3.80000	6.53743	2.00000	0.00003	-0.00017
3.90000	6.73743	2.00000	0.00001	-0.00009
4.00000	6.93743	2.00000	0.00001	-0.00005
4.10000	7.13743	2.00000	0.00000	-0.00002
4.20000	7.33743	2.00000	0.00000	-0.00001
4.30000	7.53743	2.00000	0.00000	-0.00001
4.40000	7.73743	2.00000	0.00000	-0.00000

Table III (continued)/

Table III(continued)

$$f(0) = 0.40$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	0.40000	0.00000	1.93301	-0.77320
0.10000	0.40954	0.18947	1.93301	-0.76036
0.20000	0.43764	0.37131	1.93301	-0.77895
0.30000	0.48354	0.54534	1.70002	-0.82203
0.40000	0.54644	0.71114	1.61491	-0.88244
0.50000	0.62547	0.86810	1.52320	-0.95272
0.60000	0.71974	1.01554	1.42429	-1.02512
0.70000	0.82824	1.15273	1.31236	-1.09192
0.80000		1.27901	1.20634	-1.14593
0.90000	1.08366	1.39384	1.08981	-1.18099
1.00000	1.22830	1.49689	0.97093	-1.19259
1.10000	1.38264	1.58803	0.85216	-1.17824
1.20000	1.54551	1.66741	0.73615	-1.13773
1.30000	1.71575	1.73544	0.62543	-1.07307
1.40000	1.89224	1.79275	0.52222	-0.98816
1.50000	2.07397	1.84019	0.42830	-0.88827
1.60000	2.25999	1.87876	0.34487	-0.77939
1.70000	2.44946	1.90953	0.27252	-0.66753
1.80000	2.64167	1.99363	0.21128	-0.55814
1.90000	2.83600	1.95214	0.16067	-0.45565
2.00000	3.03195	1.90609	0.11982	-0.36328
2.10000	3.22910	1.97639	0.08762	-0.28292
2.20000	3.42713	1.98386	0.06282	-0.21528
2.30000	3.62580	1.98916	0.04415	-0.16008
2.40000	3.82491	1.99285	0.03042	-0.11636
2.50000	4.02433	1.99537	0.02055	-0.08270
2.60000	4.22396	1.99706	0.01361	-0.05747
2.70000	4.42372	1.99816	0.00883	-0.03907
2.80000	4.62358	1.99887	0.00562	-0.02590
2.90000	4.82349	1.99932	0.00350	-0.01691
3.00000	5.02344	1.99960	0.00214	-0.01076
3.10000	5.22341	1.99977	0.00128	-0.00671
3.20000	5.42339	1.99987	0.00075	-0.00409
3.30000	5.62338	1.99993	0.00043	-0.00244
3.40000	5.82337	1.99996	0.00025	-0.00143
3.50000	6.02337	1.99998	0.00014	-0.00082
3.60000	6.22337	1.99999	0.00007	-0.00046
3.70000	6.42337	1.99999	0.00004	-0.00025
3.80000	6.62337	2.00000	0.00002	-0.00014
3.90000	6.82337	2.00000	0.00001	-0.00007
4.00000	7.02336	2.00000	0.00001	-0.00004
4.10000	7.22336	2.00000	0.00000	-0.00002
4.20000	7.42336	2.00000	0.00000	-0.00001
4.30000	7.62336	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = 0.45$$

$\eta$	$f$	$f^2$	$f^{33}$	$f^{44}$
0.00000	0.45000	0.00000	2.01184	-0.90533
0.10000	0.45991	0.19671	1.92268	-0.88426
0.20000	0.48905	0.38455	1.83387	-0.089685
0.30000	0.53652	0.56339	1.74246	-0.93487
0.40000	0.60141	0.73288	1.64632	-0.9-012
0.50000	0.68277	0.89245	1.54414	-1.05429
0.60000	0.77955	1.04149	1.43545	-1.11901
0.70000	0.89069	1.17934	1.32059	-1.17624
0.80000	1.01503	1.30544	1.20069	-1.21874
0.90000	1.15137	1.41936	1.07753	-1.24064
1.00000	1.29849	1.52091	0.95339	-1.23796
1.10000	1.45514	1.61009	0.83082	-1.20896
1.20000	1.62011	1.66721	0.71245	-1.15425
1.30000	1.79220	1.75281	0.60074	-1.07664
1.40000	1.97031	1.80765	0.49774	-0.98070
1.50000	2.15340	1.85270	0.40502	-0.87217
1.60000	2.34056	1.88303	0.32352	-0.75723
1.70000	2.53096	1.91779	0.25359	-0.64183
1.80000	2.72390	1.94012	0.19500	-0.53117
1.90000	2.91881	1.95714	0.14707	-0.42927
2.00000	3.11519	1.96986	0.10877	-0.33885
2.10000	3.31266	1.97917	0.07888	-0.26130
2.20000	3.51094	1.98587	0.05608	-0.19689
2.30000	3.70977	1.99058	0.03909	-0.14501
2.40000	3.90900	1.99384	0.02671	-0.10440
2.50000	4.10851	1.99604	0.01789	-0.07350
2.60000	4.30819	1.99750	0.01175	-0.05062
2.70000	4.50799	1.99845	0.00756	-0.03408
2.80000	4.70787	1.99906	0.00477	-0.02246
2.90000	4.90779	1.99944	0.00275	-0.01448
3.00000	5.10775	1.99967	0.00179	-0.00914
3.10000	5.30772	1.99981	0.00106	-0.00564
3.20000	5.50771	1.99989	0.00062	-0.00341
3.30000	5.70770	1.99994	0.00035	-0.00202
3.40000	5.90770	1.99997	0.00020	-0.00117
3.50000	6.10770	1.99998	0.00011	-0.00066
3.60000	6.30769	1.99997	0.00006	-0.00037
3.70000	6.50769	1.99999	0.00003	-0.00020
3.80000	6.70769	2.00000	0.00002	-0.00011
3.90000	6.90769	2.00000	0.00001	-0.00006
4.00000	7.10769	2.00000	0.00000	-0.00003
4.10000	7.30769	2.00000	0.00000	-0.00001
4.20000	7.50769	2.00000	0.00000	-0.00001
4.30000	7.70769	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = 0.50$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0. 00000	0. 50000	0.00000	2. 09129	-1.04565
0. 10000	0. 51028	0. 20397	1. 98861	-1. 01476
0. 20000	0. 54046	0. 39776	1. 88714	-1. 01992
0. 30000	0. 58950	0. 58133	1. 78375	-1. 05152
0. 40000	0. 65637	0. 75437	1. 67627	-1. 10025
0. 50000	0. 74000	0. 91640	1. 563414	-1. 15695
0. 60000	0. 83927	1. 06687	1. 44491	-1. 21267
0. 70000	0. 95297	1. 20521	1. 32121	-1. 25908
0. 80000	1. 07989	1. 33098	1. 19365	-1. 28901
0. 90000	1. 21874	1. 44388	1. 06415	-1. 29692
1. 00000	1. 36823	1. 54382	0. 93511	-1. 27945
1. 10000	1. 52708	1. 63100	0. 80914	-1. 23563
1. 20000	1. 69402	1. 70584	0. 68882	-1. 16688
1. 30000	1. 86786	1. 76903	0. 57648	-1. 07679
1. 40000	2. 04747	1. 82147	0. 47401	-0. 97052
1. 50000	2. 23183	1. 86420	0. 38272	-0. 85416
1. 60000	2. 42003	1. 89840	0. 30331	-0. 73401
1. 70000	2. 61127	1. 92526	0. 23585	-0. 61588
1. 80000	2. 80488	1. 94596	0. 17991	-0. 50461
1. 90000	3. 00029	1. 96160	0. 13459	-0. 40380
2. 00000	3. 19706	1. 97319	0. 09873	-0. 31564
2. 10000	3. 39483	1. 98161	0. 07101	-0. 24107
2. 20000	3. 59330	1. 98761	0. 05007	-0. 17993
2. 30000	3. 79229	1. 99181	0. 03462	-0. 13127
2. 40000	3. 99162	1. 99468	0. 02346	-0. 09363
2. 50000	4. 19119	1. 99661	0. 01558	-0. 06531
2. 60000	4. 39092	1. 99788	0. 01015	-0. 04456
2. 70000	4. 59075	1. 99869	0. 00648	-0. 02974
2. 80000	4. 79065	1. 99921	0. 00405	-0. 01942
2. 90000	4. 99059	1. 99953	0. 00249	-0. 01241
3. 00000	5. 19055	1. 99973	0. 00150	-0. 00776
3. 10000	5. 39053	1. 99984	0. 00088	-0. 00475
3. 20000	5. 59052	1. 99991	0. 00051	-0. 00285
3. 30000	5. 79051	1. 99995	0. 00029	-0. 00167
3. 40000	5. 99051	1. 99997	0. 00016	-0. 00096
3. 50000	6. 19051	1. 99999	0. 00009	-0. 00054
3. 60000	6. 39051	1. 99999	0. 00005	-0. 00030
3. 70000	6. 59051	2. 00000	0. 00002	-0. 00016
3. 80000	6. 79051	2. 00000	0. 00001	-0. 00008
3. 90000	6. 99051	2. 00000	0. 00001	-0. 00004
4. 00000	7. 19051	2. 00000	0. 00000	-0. 00002
4. 10000	7. 39051	2. 00000	0. 00000	-0. 00001
4. 20000	7. 59051	2. 00000	0. 00000	-0. 00001
4. 30000	7. 79051	2. 00000	0. 00000	-0. 00000

Table III (continued)/

Table III (continued)

$$f(0) = 0.60$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0.60000	0.00000	2.25198	-1.35119
0.10000	0.61104	0.21855	2.12005	-1.29545
0.20000	0.64328	0.42412	1.99152	-1.28110
0.30000	0.69544	0.61685	1.86288	-1.29551
0.40000	0.76622	0.79661	1.73185	-1.32697
0.50000	0.85432	0.96310	1.59728	-1.36458
0.60000	0.95838	1.11595	1.45906	-1.39834
0.70000	1.07704	1.25482	1.31803	-1.41957
0.80000	1.20888	1.37951	1.17580	-1.42139
0.90000	1.35247	1.49001	1.03456	-1.39921
1.00000	1.50641	1.58654	0.89683	-1.35099
1.10000	1.66933	1.66958	0.76521	-1.27738
1.20000	1.83990	1.73986	0.64210	-1.18141
1.30000	2.01691	1.79835	0.52951	A. 06798
1.40000	2.19922	1.84616	0.42089	-0.94322
1.50000	2.38583	1.88455	0.34103	-0.81365
1.60000	2.57586	1.91480	0.26612	-0.68548
1.70000	2.76856	1.93819	0.20372	-0.56401
1.80000	2.96331	1.95593	0.15296	-0.45327
1.90000	3.15959	1.96913	0.11263	-0.35586
2.00000	3.35701	1.97875	0.08131	-0.27297
2.10000	3.55525	1.98564	0.05756	-0.20462
2.20000	3.75407	1.99047	0.03994	-0.14993
2.30000	3.95330	1.99379	0.02717	-0.10741
2.40000	4.15280	1.99603	0.01612	-0.07524
2.50000	4.35248	1.99750	0.01184	-0.05155
2.60000	4.55226	1.99846	0.00759	-0.03455
2.70000	4.75216	1.99907	0.00477	-0.02266
2.80000	4.95209	1.99945	0.00294	-0.01454
2.90000	5.15204	1.99968	0.00177	-0.00913
3.00000	5.35202	1.99981	0.00105	-0.00561
3.10000	5.55200	1.99990	0.00061	-0.00338
3.20000	5.75200	1.99994	0.00035	-0.00199
3.30000	5.95199	1.99997	0.00019	-0.00115
3.40000	6.15199	1.99998	0.00011	-0.00065
3.50000	6.35199	1.99999	0.00006	-0.00036
3.60000	6.55199	1.99999	0.00003	-0.0001 p
3.70000	6.75199	2.00000	0.00002	-0.00010
3.80000	6.95199	2.00000	0.00001	-0.00005
3.90000	7.15199	2.00000	0.00000	-0.00003
4.00000	7.35199	2.00000	0.00000	-0.00001
4.10000	7.55199	2.00000	0.00000	-0.00001
4.20000	7.75199	2.00000	0.00000	-0.00000

Table III (continued) /

Table III (continued)

$f(0) = 0.70$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0.70000	0.00000	2.41490	-1.69043
0.10000	0.71180	0.23321	2.25075	-1.60208
0.20000	0.74611	0.45036	2.09290	-1.56153
0.30000	0.80135	0.65186	1.93739	-1.55253
0.40000	0.87596	0.83783	1.78182	-1.56081
0.50000	0.96840	1.00818	1.62508	-1.57372
0.60000	1.07708	1.16281	1.46729	-1.58038
0.70000	1.20043	1.30164	1.30951	-1.57198
0.80000	1.33688	1.42477	1.15361	-1.54223
0.90000	1.48487	1.53250	1.00190	-1.413769
1.00000	1.64289	1.62537	0.85692	-1.40702
1.10000	1.80948	1.70419	0.72111	-1.30403
1.20000	1.98329	1.76997	0.59658	-1.18319
1.30000	2.16308	1.82393	0.48490	-1.04888
1.40000	2.34773	1.86741	0.38701	-0.90859
1.50000	2.53626	1.90180	0.30317	-0.76891
1.60000	2.72783	1.92850	0.23302	-0.63563
1.70000	2.92175	1.94883	0.17568	-0.51330
1.80000	3.11743	1.96402	0.12990	-0.40495
1.90000	3.31442	1.97514	0.09418	-0.31215
2.00000	3.51235	1.98313	0.06695	-0.23515
2.10000	3.71096	1.98876	0.04666	-0.17314
2.20000	3.91005	1.99265	0.03188	-0.12464
2.30000	4.10945	1.99528	0.02135	-0.08773
2.40000	4.30907	1.99702	0.01402	-0.06040
2.50000	4.50884	1.99816	0.00902	-0.04067
2.60000	4.70869	1.99888	0.00569	-0.02680
2.70000	4.90860	1.99933	0.00352	-0.01728
2.80000	5.10855	1.99961	0.00213	-0.01090
2.90000	5.30852	1.99978	0.00127	-0.00673
3.00000	5.50851	1.99987	0.00074	-0.00407
3.10000	5.70850	1.99993	0.00042	-0.00241
3.20000	5.90849	1.99996	0.00024	-0.00140
3.30000	6.10849	1.99998	0.00013	-0.00079
3.40000	6.30849	1.99999	0.00007	-0.00044
3.50000	6.50849	2.00000	0.00004	-0.00024
3.60000	6.70849	2.00000	0.00002	-0.00013
3.70000	6.90849	2.00000	0.00001	-0.00007
3.80000	7.10849	2.00000	0.00000	-0.00003
3.90000	7.30849	2.00000	0.00000	-0.00002
4.00000	7.50849	2.00000	0.00000	-0.00001
74.10000	0.8 6 9	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = 0.80$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0.80000	0.00000	2.57988	-2.06390
0.10000	0.81256	0.24791	2.38053	-1.93433
0.20000	0.84894	0.47643	2.19117	-1.86017
0.30000	0.90723	0.68633	2.00733	-1.82111
0.40000	0.98560	0.87799	1.82636	-1.80005
0.50000	1.08223	1.05165	1.64720	-1.78265
0.60000	1.19533	1.20750	1.47010	-1.75726
0.70000	1.32314	1.34578	1.29631	-1.71520
0.80000	1.46392	1.46693	1.12780	-1.65101
0.90000	1.61598	1.57160	0.96692	-1.56253
1.00000	1.77772	1.66065	0.81608	-1.45076
1.10000	1.94763	1.73522	0.67743	-1.31938
1.20000	2.12432	1.79660	0.55267	-1.17406
1.30000	2.30656	1.84625	0.44287	-1.02150
1.40000	2.49323	1.88568	0.34839	-0.86862
1.50000	2.68341	1.91643	0.26895	-0.72170
1.60000	2.87628	1.93941	0.20369	-0.58586
1.70000	3.07120	1.95517	0.15130	-0.46466
1.80000	3.26764	1.97058	0.11021	-0.36011
1.90000	3.46520	1.97995	0.07871	-0.27274
2.00000	3.66354	1.98658	0.05511	-0.20191
2.10000	3.86245	1.99118	0.03783	-0.14613
2.20000	4.06173	1.99431	0.02546	-0.10341
2.30000	4.26127	1.99639	0.01680	-0.07157
2.40000	4.46099	1.99776	0.01086	-0.04845
2.50000	4.66081	1.99863	0.00688	-0.03209
2.60000	4.86070	1.99918	0.00428	-0.02080
2.70000	5.06064	1.99952	0.00261	-0.01319
2.80000	5.26060	1.99972	0.00156	-0.00819
2.90000	5.46058	1.99984	0.00091	-0.00497
3.00000	5.66057	1.99991	0.00052	-0.00296
3.10000	5.86056	1.99995	0.00029	-0.00172
3.20000	6.06056	1.99997	0.00016	-0.00098
3.30000	6.26056	1.99999	0.00009	-0.00055
3.40000	6.46055	1.99999	0.00005	-0.00030
3.50000	6.66055	2.00000	0e00002	-0.00016
3.60000	6.86055	2.00000	0.00001	-0.00008
3.70000	7.06055	2.00000	0.00001	-0.00004
3.80000	7.26055	2.00000	0.00000	-0.00002
3.90000	7.46055	2.00000	0.00000	-0.00001
4.00000	7.66055	2.00000	0.00000	-0.00001
4.10000	7.86055	2.00000	0.00000	-0.00000
4.20000				



Table III (continued)

$$f(0) = 0.90$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	0. yoooo	0.00000	2.50925	-2.47211
0.10000	0.91333	0.26265	2.20327	-2.29178
0.20000	0.95177	0.50233	2.07274	-2.09983 -2.17601
0.30000	1.01307	0.72022		
0.40000	1.09511	0.91709	1.86568	-2.04312
0.50000	1.19581	1.09353	1.66400	
0.60000	1.31315	1.25008	1.46801	-1.98983 -1.92773
0.70000	1.44518	1.38736	1.27904	-1.84844
0.80000	1.59001	1.50618	1.09905	-1.74751
0.90000	1.74584	1.607%	0.93029	-1.62414
1.00000	1.91098	1.69268	0.77490	-1.48081
1.10000	2.08388	1.76303	0.63463	-1.32250
1.20000	2.26315	1.82015	0.51068	-1.15575
1.30000	2.44753	1.86572	0.40353	-0.98766
1.40000	2.63596	1.90141	0.31298	-0.82499
1.50000	2.82754	1.92804	0.23817	-0.67344
1.60000	3.02151	1.94952	0.17779	-0.53710
1.70000	3.21726	1.96482	0.13015	-0.41873
1.80000	3.41433	1.97592	0.09343	-0.31898
1.90000	3.61234	1.98381	0.06575	-0.23752
2.00000	3.81101	1.98931	0.04537	-0.17290
2.10000	4.01015	1.99307	0.03069	-0.12306
2.20000	4.20959	1.99559	0.02035	-0.08566
2.30000	4.40923	1.99724	0.01323	-0.05832
2.40000	4.60902	1.99831	0.00843	-0.03084
2.50000	4.80888	1.99898	0.00526	-0.02532
2.60000	5.00880	1.99940	0.00322	-0.01615
2.70000	5.20876	1.99965	0.00193	-0.01008
2.80000	5.40873	1.99980	0.00114	-0.00616
2.90000	5.60872	1.99989	0.00066	-0.00368
3.00000	5.80871	1.999%	0.00037	-0.00216
3.10000	6.00870	1.99997	0.00021	-0.00124
3.20000	6.20870	1.99998	0.00011	-0.00069
3.30000	6.40870	1.99999	0.00006	-0.00038
3.40000	6.60870	1.99993	0.00003	-0.00021
3.50000	6.80870	2.00000	0.00002	-0.00011
3.60000	7.00870	2.00000	0.00001	-0.00006
3.70000	7.20870	2.00000	00 00000	-0.00003
3.80000	7.40870	2.00000	0.00000	-0.00001
3.90000	7.60870	2.00000	0.00000	-0.00001
4.00000	7.80870	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = 1.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	1.00000	0.00000	2.91547	-2.91547
0.10000	1.01410	0.27741	2.63678	-2.67397
0.20000	1.05459	0.52802	2.37817	-2.50800
0.30000	1.11887	0.75351	2.13368	-2.38732
0.40000	1.20450	0.95511	1.89999	-2.28854
0.50000	1.30913	1.13382	1.67584	-2.19390
0.60000	1.43053	1.29060	1.46150	-2.09073
0.70000	1.56656	1.42649	1.25826	-1.97113
0.80000	1.71517	1.54268	1.06795	-1.83172
0.90000	1.87448	1.64057	0.89256	-1.67309
1.00000	2.04273	1.72175	0.73385	-1.49906
1.10000	2.21834	1.78794	0.59307	-1.31563
1.20000	2.39988	1.84098	0.47081	-1.12989
1.30000	2.58616	1.88271	0.36694	-0.94896
1.40000	2.77611	1.91495	0.28065	-0.77913
1.50000	2.96889	1.93933	0.21059	-0.62522
1.60000	3.16378	1.95755	0.15498	-0.49034
1.70000	3.36023	1.97079	0.11185	-0.37585
1.80000	3.55781	1.98026	0.07715	-0.28160
1.90000	3.75619	1.98690	0.05491	-0.20626
2.00000	3.95513	1.99147	0.03735	-0.14771
2.10000	4.15444	1.99411	0.02490	-0.10345
2.20000	4.35400	1.99517	0.01628	-0.07086
2.30000	4.55373	1.99789	0.01043	-0.04749
2.40000	4.75356	1.99872	0.00655	-0.03113
2.50000	4.95346	1.99924	0.00403	-0.01997
2.60000	5.15340	1.99956	0.00243	-0.01254
2.70000	5.35337	1.99975	0.00144	-0.00771
2.80000	5.55335	1.99986	0.00084	-0.00464
2.90000	5.75334	1.99992	0.00047	-0.00273
3.00000	5.95333	1.99996	0.00026	-0.00158
3.10000	6.15333	1.99998	0.00014	-0.00089
3.20000	6.35333	1.99999	0.00008	-0.00049
3.30000	6.55333	1.99999	0.00004	-0.00027
3.40000	6.75333	2.00000	0.00002	-0.00014
3.50000	6.95333	2.00000	0.00001	-0.00007
3.60000	7.15333	2.00000	0.00001	-0.00004
3.70000	7.35333	2.00000	0.00000	-0.00002
3.80000	7.55333	2.00000	0.00000	-0.00001
3.90000	7.75333	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = 1.10$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	1.10000	0.00000	3.08582	-3.39440
0.10000	1.11488	0.29218	2.76300	-3.08041
0.20000	1.15741	0.55348	2.46680	-2.85510
0.30000	1.22462	0.78619	2.19025	-2.60223
0.40000	1.31375	0.99205	1.92952	-2.53491
0.50000	1.42219	1.17256	1.45103	-2.39365
0.60000	1.54747	1.32914	1.23448	-2.24542
0.70000	1.68727	1.46328	.	-2.08290
0.80000	1.83943	1.57660	1.03501	-1.90383
0.90000	2.00196	1.67090	0.85421	-1.71009
1.00000	2.17304	1.74811	0.69332	-1.50662
1.10000	2.35108	1.81025	0.55300	-1.30014
1.20000	2.53466	1.85939	0.43316	-1.09792
1.30000	2.72259	1.89754	0.33305	-0.90676
1.40000	2.91387	1.92661	0.25127	-0.73216
1.50000	3.10767	1.94834	0.18595	-0.57787
1.60000	3.30334	1.96427	0.13496	-0.44582
1.70000	3.50038	1.97573	0.09605	-0.33621
1.80000	3.69838	1.98381	0.06702	-0.24787
1.90000	3.89706	1.98939	0.04585	-0.17867
2.00000	4.09620	1.99318	0.03075	-0.12594
2.10000	4.29565	1.99569	0.02021	-0.08683
2.20000	4.49531	1.99733	0.01303	-0.05856
2.30000	4.69510	1.99838	0.00823	-0.03864
2.40000	4.89497	1.99903	0.00510	-0.02495
2.50000	5.09489	1.99943	0.00309	-0.01576
2.60000	5.29485	1.99967	0.00184	-0.00975
2.70000	5.49482	1.99982	0.00107	-0.00590
2.80000	5.69481	1.99990	0.00061	-0.00350
2.90000	5.89480	1.99994	0.00034	-0.00203
3.00000	6.09480	1.99997	0.0001 g	-0.00115
3.10000	6.29480	1.99998	0.00010	-0.00064
3.20000	6.49480	1.99999	0.00005	-0.00035
3.30000	6.69479	2.00000	0.00003	-0.0001 y
3.40000	6.89479	2.00000	0.00001	-0.00010
3.50000	7.09479	2.00000	0.00001	-0.00005
3.60000	7.29479	2.00000	0.00000	-0.00003
3.70000	7.49479	2.00000	0.00000	-0.00001
3.80000	7.69479	2.00000	0.00000	-0.00001
3.90000	7.89479	2.00000	0.00000	-0.00000

Table III (continued)

$$f(0) = 1.20$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	1.20000	0.00000	3.25772	-3.90926
0.10000	1.21566	0.30694	2.88782	-3.51059
0.20000	1.26022	0.57869	2.55215	-3.21626
0.30000	1.33032	0.81023	2.24254	-2.90330
0.40000	1.42287	1.02791	1.90000	-2.78098
0.50000	1.53498	1.20978	1.68604	-2.58804
0.60000	1.66397	1.36576	1.43702	-2.39115
0.70000	1.80734	1.49785	1.20818	-2.10359
0.80000	1.96281	1.60311	1.00070	-1.9419
0.90000	2.12831	1.69373	0.81565	-1.73595
1.00000	2.30193	1.77200	0.65363	-1.50463
1.10000	2.4022	1.83022	0.51460	-1.27734
1.20000	2.66760	1.87566	0.39730	-1.06116
1.30000	2.85699	1.91047	0.30180	-0.86223
1.40000	3.04941	1.93665	0.22464	-0.68501
1.50000	3.24409	1.95595	0.1400	-0.53203
1.60000	3.44042	1.96991	0.11741	-0.40395
1.70000	3.63794	1.97901	0.08242	-0.29984
1.80000	3.83626	1.98670	0.05673	-0.21761
1.90000	4.03521	1.99140	0.03827	-0.15444
2.00000	4.23451	1.99454	0.02532	-0.10720
2.10000	4.43408	1.99659	0.01641	-0.07278
2.20000	4.63381	1.99792	0.01043	-0.04835
2.30000	4.83364	1.99875	0.00650	-0.03142
2.40000	5.03355	1.99926	0.00397	-0.01999
2.50000	5.23349	1.99957	0.002313	-0.01244
2.60000	5.43346	1.99976	0.00140	-0.00758
2.70000	5.63344	1.99986	0.00030	-0.00452
2.80000	5.83343	1.99993	0.00045	-0.00264
2.90000	6.03342	1.99996	0.00025	-0.00151
3.00000	6.23342	1.99998	0.00014	-0.00085
3.10000	6.43342	1.99999	0.00007	-0.00046
3.20000	6.63342	1.93399	0.00004	-0.00025
3.30000	6.83342	2.00000	0.00002	-0.00013
3.40000	7.03342	2.00000	0.00001	-0.00007
3.50000	7.23342	2.00000	0.00000	-0.00003
3.60000	7.43342	2.00000	0.00000	-0.00002
3.70000	7.63342	2.00000	0.00000	-0.00001
3.80000	7.83342	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$f(0) = 1.30$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	1.30000	0.00000	3.43104	-4.46035
0.10000	1.31644			-3.96394
0.20000	1.36302	0.32169	2.63419	-3.59045
0.30000	1.43597	0.60365	2.29064	-3.28929
0.40000	1.64750	1.06270	1.97510	-3.02556
0.50000	1.78002	1.24550	1.68507	-2.77616
0.60000	1.78002			-2.52740
0.70000	1.92677	1.53030	1.17979	-2.27318
0.80000	2.08533	1.63735	0.96543	-2.01325
0.90000	2.25357	1.72426	0.77721	-1.75150
1.00000	2.42960	1.79365	0.61500	-1.49420
1.10000	2.61180	1.84809	0.47800	-1.24843
1.20000	2.79880	1.89004	0.36472	-1.02077
1.30000	2.98947	1.92176	0.27308	-0.81636
1.40000	3.18208	1.94529	0.20058	-0.63841
1.50000	3.37831	1.96241	0.14449	-0.48812
1.60000	3.57520	1.97464	0.10206	-0.36489
1.70000	3.77312	1.98319	0.07069	-0.26671
1.80000		1.98906	0.04800	-0.19063
1.90000	4.17087	1.99301	0.03195	-0.13325
2.00000	4.37031	1.99561	0.02005	-0.09111
2.10000	4.56996	1.99730	0.01334	-0.06094
2.20000	4.76975			-0.03989
2.30000	4.96962	1.99836	0.00836 0.00514	-0.02554
2.40000	5.16955	1.99943	0.00310	-0.01604
2.50000	5.36950	1.99967		-0.00982
2.60000	5.56940	1.99981	0.00183 0.00106	-0.00590
2.70000	5.76946	1.99989	0.00060	-0.00347
2.80000	5.96946	1.99994	0.00033	-0.00200
2.90000	6.16945	1.99996	0.00018	-0.00113
3.00000	6.36945	1.99998	0.00010	-0.00062
3.10000	6.56945	1.99998	0.00005	-0.00034
3.20000	6.76944	1.99999	0.00003	-0.00018
3.30000	6.96944	1.99999	0.00001	-0.00009
3.40000	7.16944	1.99999	0.00001	-0.00005
3.50000	7.36944	1.99999	0.00000	-0.00002
3.60000	7.56944	1.99999	0.00000	-0.00001
3.70000	7.76944	1.99999	0.00000	-0.00001
3.80000	7.96944	1.99999	0.00000	-0.00000
3.90000	8.16944	1.99999	0.00000	-0.00000
4.00000	8.36944	1.99999	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$f(0) = 1.40$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	1.40000	0.00000	3.60574	-5.04804
0.10000	1.41722	0.33642	3.13287	-4.43996
0.20000	1.46581	0.62832	2.71297	-3.97668
0.30000	1.54156	0.88039	2.33471	-3.59909
0.40000	1.64069	1.09643	1.99164	-3.26765
0.50000	1.75976	1.27977	1.68050	-2.95727
0.60000	1.89565	1.43354	1.39997	-2.65386
0.70000	2.04558	1.56077	1.14970	-2.35180
0.80000	2.20703	1.66448	0.92956	-2.05157
0.90000	2.37780	1.74767	0.73919	-1.7574
1.00000	2.55598	1.81328	0.57763	-1.47640
1.10000	2.73996	1.86410	0.44327	-1.21455
1.20000	2.92840	1.90276	0.33389	-0.97777
1.30000	3.12019	1.93162	0.24677	-0.76996
1.40000	3.31446	1.95275	0.17889	-0.59292
1.50000	3.51054	1.96793	0.12718	-0.44646
1.60000	3.70790	1.97862	0.08865	-0.32872
1.70000	3.90616	1.98601	0.06059	-0.23667
1.80000	4.10503	1.99101	0.04060	-0.16665
1.90000	4.30430	1.99433	0.02667	-0.11478
2.00000	4.50385	1.99669	0.01717	-0.07733
2.10000	4.70358	1.99786	0.01084	-0.05098
2.20000	4.90341	1.99873	0.00671	-0.03288
2.30000	5.10331	1.99925	0.00407	-0.02076
2.40000	5.30325	1.99957	0.00242	-0.01283
2.50000	5.50322	1.99976	0.00141	-0.00776
2.60000	5.70320	1.99987	0.00081	-0.00459
2.70000	5.90319	1.99993	0.00045	-0.00266
2.80000	6.10319	1.99996	0.00025	-0.00151
2.90000	6.30318	1.99998	0.00013	-0.00084
3.00000	6.50318	1.99999	0.00007	-0.00046
3.10000	6.70318	1.99999	0.00004	-0.00024
3.20000	6.90318	2.00000	0.00002	-0.00013
3.30000	7.10318	2.00000	0.00001	-0.00007
3.40000	7.30318	2.00000	0.00000	-0.00003
3.50000	7.50318	2.00000	0.00000	-0.00002
3.60000	7.70318	2.00000	0.00000	-0.00001
3.70000	7.90318	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = 1.50$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	1.50000	0.00000	3.78169	-5.67254
0.10000	1.51800	0.35112	3.25296	-4.93799
0.20000	1.56858	0.65271	2.78847	-4.37393
0.30000	1.64709	0.91049	2.37483	-3.91155
0.40000	1.74937	1.12911	2.00428	-3.50625
0.50000	1.87174	1.31263	1.67261	-3.13070
0.60000	2.01086	1.46485	1.37766	-2.77029
0.70000	2.16379	1.58935	1.11825	-2.41965
0.80000	2.32793	1.68964	0.89339	-2.07975
0.90000	2.50102	1.76913	0.70180	-1.75523
1.00000	2.68117	1.83105	0.54164	-1.45224
1.10000	2.86675	1.87842	0.41046	-1.17668
1.20000	3.05646	1.91400	0.30526	-0.93301
1.30000	3.24924	1.94022	0.22272	-0.72368
1.40000	3.44426	1.95918	0.15938	-0.54896
1.50000	3.64090	1.97262	0.11185	-0.40722
1.60000	3.83865	1.98197	0.07696	-0.2954~
1.70000	4.03719	1.98834	0.05191	-0.20958
1.80000	4.23525	1.99260	0.03433	-0.14543
1.90000	4.43566	1.99538	0.02226	-0.09872
2.00000	4.63530	1.99718	0.01414	-0.06556
2.10000	4.83508	1.99830	0.00881	-0.04261
2.20000	5.03494	1.99900	0.00538	-0.02710
2.30000	5.23487	1.99942	0.00322	-0.01687
2.40000	5.43482	1.97967	0.00189	-0.01028
2.50000	5.63430	1.99982	0.00109	-0.00613
2.60000	5.83478	1.99990	0.00061	-0.00358
2.70000	6.03478	1.99995	0.00034	-0.00205
2.80000	6.23477	1.99997	0.00018	-0.00115
2.90000	6.43477	1.99999	0.00010	-0.00063
3.00000	6.63477	1.99999	0.00005	-0.00034
3.10000	6.83477	2.00000	0.00003	-0.00018
3.20000	7.03477	2.00000	0.00001	-0.00009
3.30000	7.23477	2.00000	0.00001	-0.00005
3.40000	7.43477	2.00000	0.00000	-0.00002
3.50000	7.63477	2.00000	0.00000	-0.00001
3.60000	7.83477	2.00000	0.00000	-0.00001
3.70000	8.03477	2.00000	0.00000	-0.00000

Table III (continued)/

Table III (continued)

$$f(0) = 2.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	2.00000	00.00000	4.67770	-9.35541
0.10000	2.02191	0.42387	3.82696	-7.73777
0.20000	2.08220	0.77007	3.11791	-6.49210
0.30000	2.17376	1.05116	2.52087	-5.47977
0.40000	2.29061	1.27732	2.01694	-4.62002
0.50000	2.42769	1.45721	1.59333	-3.86812
0.60000	2.58076	1.59834	1.24053	-3.20150
0.70000	2.74629	1.70739	0.95055	-2.61050
0.80000	2.92137	1.79029	0.71605	-2.09185
0.90000	3.10365	1.85220	0.52984	-1.64444
1.00000	3.29127	1.89762	0.38487	-1.26671
1.10000	3.48276	1.93032	0.27132	-0.95538
1.20000	3.67701	1.95341	0.19179	-0.70520
1.30000	3.87321	1.96941	0.13149	-0.50931
1.40000	4.07073	1.98027	0.08840	-0.35986
1.50000	4.26914	1.98751	0.05827	-0.24876
1.60000	4.46815	1.99224	0.03765	-0.16823
1.70000	4.66753	1.99527	0.02385	-0.11133
1.80000	4.86716	1.99717	0.01481	-0.07209
1.90000	5.06704	1.99834	0.00902	-0.04569
2.00000	5.26682	1.99904	0.00538	-0.02834
2.10000	5.46674	1.99946	0.00315	-0.01721
2.20000	5.66670	1.99970	0.00181	-0.01023
2.30000	5.86668	1.99984	0.00102	-0.00596
2.40000	6.06667	1.99991	0.00056	-0.00339
2.50000	6.26666	1.99995	0.00030	-0.00189
2.60000	6.46666	1.99998	0.00016	-0.00104
2.70000	6.66665	1.99999	0.00008	-0.00055
2.80000	6.86665	1.99999	0.00004	-0.00029
2.90000	7.06665	2.00000	0.00002	-0.00015
3.00000	7.26665	2.00000	0.00001	-0.00008
3.10000	7.46665	2.00000	0.00000	-0.00004
3.20000	7.66665	2.00000	0.00000	-0.00002
3.30000	7.86665	2.00000	0.00000	-0.00001
3.40000	8.06665	2.00000	0.00000	-0.00000

Table III (continued)/



Table III (continued)

$$f(0) = 2.50$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	2.50000	0.00000	05.5953	-13.9882
0.05000	2.50671	0.26298	04.9373	-12.3763
0.10000	2.52578			-10.9968
0.15000	2.55575	0.49497	04.3538	03.8002
0.20000	2.59532	0.87935	03.3714	-08.7497
0.25000	2.64332	1.03738	02.9576	-07.8179
0.30000	2.69873	1.17585	02.5879	-06.9841
0.35000	2.76062	1.29684	02.2578	-06.2330
0.40000	2.82815	1.40223	01.9635	-05.5530
0.45000	2.90061	1.49372	01.7015	-04.9354
0.50000	2.97732	1.57286	01.4690	-04.3737
0.55000	3.05771	1.64107	01.2633	-03.8628
0.60000	3.14127		01.0819	-03.3987
0.65000	3.22753	1.74963	00.9227	-02.9780
0.70000	3.31610	1.79220	00.7835	-02.5980
0.75000	3.40664	1.82827	00.6623	-02.2561
0.80000	3.49884	1.85870	00.5573	-01.9498
0.85000	3.59243	1.88424	00.4667	-01.6767
0.90000	3.68719	1.90558	00.3891	-01.4346
0.95000	3.78293	1.92334	00.3228	-01.2211
1.00000	3.87947	1.93803	00.2665	-01.0340
1.05000	3.97669	1.95013	00.2190	-00.8709
1.10000	4.07445	1.96006	00.1791	-00.7296
1.15000	4.17266	1.96815	00.1457	-00.6080
1.20000	4.27124	1.97472	00.1180	-00.5039
1.25000	4.37011	1.98003	00.0951	-00.4154
1.30000	4.46923	1.98429	00.0762	-00.3406
1.35000	4.56855	1.98771	00.0608	-00.2778
1.40000	4.66799	1.99042	00.0483	-00.2253
1.45000	4.76756	1.99257	00.0381	-00.1818
1.50000	4.86724	1.99427	00.0300	-00.1458
1.55000	4.96698	1.99560	00.0234	-00.1164
1.60000	5.06679	1.99663	00.0182	-00.0924
1.65000	5.16664	1.99744	00.0141	-00.0729
1.70000	5.26653	1.99806	00.0109	-00.0573
1.75000	5.36645	1.99854	00.0083	-00.0447
1.80000	5.46638	1.99890	00.0064	-00.0348
1.85000	5.56634	1.99918	00.0048	-00.0269
1.90000	5.66630	1.99939	00.0036	-00.0207
1.95000	5.76627	1.99955	00.0027	-00.0158
2.00000	5.86625	1.99967	00.0020	-00.0120
2.05000	5.96624	1.99976	00.0015	-00.0091
2.10000	6.06623	1.99982	00.0011	-00.0068
2.15000	6.16622	1.99987	00.0008	-00.0051
2.20000	6.26622	1.99991	00.0006	-00.0038
2.25000	6.36621	1.99993	00.0004	-00.0028
2.30000	6.46621	1.99995	00.0003	-00.0021
2.35000	6.56621	1.99997	00.0002	-00.0015
2.40000	6.66621	1.99998	00.0002	-00.0011
2.45000	6.76621	1.99998	00.0001	-00.0008
2.50000	6.86620	1.99999	00.0001	-00.0006
2.55000	6.96620	1.99999	00.0001	-00.0004
2.60000	7.06620	1.99999	00.0000	-00.0003
2.65000	7.16620	2.00000	00.0000	-00.0002
2.70000	7.26620	2.00000	00.0000	-00.0002
2.75000	7.36620	2.00000	00.0000	-00.0001
2.80000	7.46620	2.00000	00.0000	-00.0001
2.85000	7.56620	2.00000	00.0000	-00.0001
2.90000	7.66620	2.00000	00.0000	-00.0000

Table III (continued)

$$f(0) = 3.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.0000	3.00000			-19.5867
0.05000	3.00777	0.00000	0.52888	-16.8999
0.10000	3.02961	0.56392	0.1493	-14.6386
0.15000	3.06355	0.78805	0.5562	-12.7117
0.20000	3.10788	0.98034	0.7777	-11.0524
0.25000	3.16112	1.14496	0.9405	-09.6113
0.30000	3.22198	1.28551	0.25921	-08.3517
0.35000	3.28933	1.40515	0.2028	-07.2456
0.40000	3.36219	1.50665	01.8653	-06.2717
0.45000	3.43973	1.59245	01.5737	-05.4130
0.50000	3.52121	1.66469	01.3223	-04.6563
0.55000	3.60601	1.72527	01.1065	-03.9902
0.60000	3.69357	1.77586	00.9220	-03.4054
0.65000	3.78345	1.81793	00.7648	-02.8936
0.70000	3.87525			-02.4473
0.75000	3.96862	1.85274	00.5191	-02.0600
0.80000	4.06330	1.90495	00.4247	-01.7255
0.85000	4.15905	1.92415	00.458	-01.4380
0.90000	4.25566	1.93974	00.2802	-01.1923
0.95000	4.35297	1.95235	00.2259	-00.9834
1.00000	4.45085	1.96250	00.1813	-00.8069
1.05000	4.54919	1.97062	00.1448	-00.6585
1.10000	4.64789	1.97708	00.1150	-00.5346
1.15000	4.74687	2.98221	00.0909	-00.4317
1.20000	4.84609	1.98626	00.0716	-00.346%
1.25000	4.94548	1.98943	00.0560	-00.2770'
1.30000	5.04502	1.99191	00.0436	-00.2202
1.35000	5.14467	1.99384	00.0338	-00.1740
1.40000	5.24440	1.99533	00.0262	-00.1368
1.45000	5.34419	1.99647	00.0200	-00.1070
1.50000	5.44404	1.99724	00.0116 00.0153	-00.0644 -00.0832'
1.55000	5.54393	1.99774		
1.60000	5.64384	1.99853	00.0088	-00.0496
1.65000	5.74378	1.99891	00.0066	-00.0379
1.70000	5.84373	1.99920	00.0049	-00.0289
1.75000	5.94369	1.99941	00.0037	-00.0219
1.80000	6.04367	1.99954	00.0027	-00.0165
1.85000	6.14365	1.99961	00.0020	-00.0124
1.90000	6.24364	1.99977	00.0015	-00.0092
1.95000	6.34363	1.99984	00.0011	-00.0068
2.00000	6.44362	1.99988	00.0008	-00.0050
2.05000	6.54362	1.99992	00.0006	-00.0037
2.10000	6.64361	1.99994	00.0004	-00.0027
2.15000	6.74361	1.99996	00.0003	-00.0020
2.20000	6.84361	1.99997	00.0002	-00.0014
2.25000	6.94361	1.99998	00.0001	-00.0010
2.30000	7.04361	1.99999	00.0001	-00.0007
2.35000	7.14361	1.99999	00.0001	-00.0005
2.40000	7.24361	1.99999	00.0001	-00.0004
2.45000	7.34360	2.00000	00.0000	-00.0003
2.50000	7.44360	2.00000	0000000	-00.0002
2.55000	7.54360	2.00000	00.0000	-00.0001
2.60000	7.64360	2.00000	00.0000	-00.0001
2.65000	7.74360	2.00000	00.0000	-00.0001
2.70000	7.84360	2.00000	00.0000	-00.0000
2.75000	7.94360	2.00000	00.0000	-00.0000

Table III (continued)

$$f(0) = 4.00$$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000	4.00000	0.00000	08.4296	-33.7183-
0.05000	4.00987	0.38198	06.9004	-27.6698
0.10000	4.03705	0.69455	05.6434	-22.7825
0.15000	4.07838	0.94999	04.6073	-18.7905
0.20000	4.13126	1.15830	03.7526	-15.5031
0.25000	4.19356	1.32773	03.0477	-12.7806
0.30000	4.26350	1.46513	02.4669	-10.5178
0.35000	4.33964	1.57614	01.9896	-08.6341
0.40000	4.42076	1.66551	01.5983	-07.0657
0.45000	4.50589	1.73716	01.2786	-05.7614
0.50000	4.59424	1.79437	01.0185	-04.6792
0.55000	4.68513	1.83983	00.8076	-03.7838
0.60000	4.77806	1.87580	00.6375	-03.0460
0.65000	4.87259	1.90413	00.5008	-02.4404
0.70000	4.96837	1.92634	00.3916	-01.9479
0.75000	5.06514	1.94367	00.3047	-01.5479
0.80000	5.16268	1.95712	00.2360	-01.2183
0.85000	5.26080	1.96751	00.1819	-00.9567
0.90000	5.35939	1.97550	00.1395	-00.7474
0.95000	5.45832	1.98161	00.1064	-00.5808
1.00000	5.55752	1.98626	00.0808	-00.4490
1.05000	5.65693	1.98978	00.0610	-00.3453
1.10000	5.75649	1.99244	00.0459	-00.2642
1.15000	5.85616	1.99443	00.0343	-00.2010
1.20000	5.95592	1.99592	00.0256	-00.1522
1.25000	6.05575	1.99702	00.0189	-00.1146
1.30000	6.15562	1.99786	00.0139	-00.0858
1.35000	6.25553	1.99844	00.0102	-00.0640
1.40000	6.35546	1.99888	00.0075	-00.0474
1.45000	6.45541	1.99920	00.0054	-00.0350
1.50000	6.55538	1.99943	00.0039	-00.0256
1.55000	6.65535	1.99959	00.0028	-00.0187
1.60000	6.75534	1.99971	00.0020	-00.0136
1.65000	6.85533	1.99980	00.0014	-00.0098
1.70000	6.95532	1.99986	00.0010	-00.0070
1.75000	7.05531	1.99990	00.0007	-00.0050
1.80000	7.15531	1.99993	00.0005	-00.0036
1.85000	7.25530	1.99995	00.0003	-00.0025
1.90000	7.35530	1.99997	00.0002	-00.0018
1.95000	7.45530	1.99998	00.0002	-00.0012
2.00000	7.55530	1.99999	00.0001	-00.0009
2.05000	7.65530	1.99999	00.0001	-00.0006
2.10000	7.75530	1.99999	00.0001	-00.0004
2.15000	7.85530	2.00000	00.0000	-00.0003
2.20000	7.95530	2.00000	00.0000	-00.0002
2.25000	8.05530	2.00000	00.0000	-00.0001
2.30000	8.15530	2.00000	00.0000	-00.0001
2.35000	8.25530	2.00000	00.0000	-00.0001
2.40000	8.35530	2.00000	00.0000	-00.0000

Table III (continued)

$f(0) = 5.00$

$\eta$	$f$	$f'$	$f''$	$f'''$
0.00000		0.00000	10.3596	-51.7982
0.05000	5.01197	0.45827	08.0666	-40.4291
0.10000	5.04414	0.81494	06.2740	-31.6468
0.15000	5.09211	1.09210	04.8699	-24.7981
0.20000	5.15232	1.30696	03.7698	-19.4232
0.25000	5.22200	1.47303	02.9087	-15.1893
0.30000	5.29899		02.2361	-11.8690
0.35000	5.38160	1.60095 1.69910	01.7121	-09.2141
0.40000	5.46852	1.77411	01.3054	-07.1387
0.45000	5.55872	1.83117	00.9909	-05.5082
0.50000	5.65141	1.87440	00.7487	-04.2315
0.55000	5.74197	1.90698	00.5631	-03.2357
0.60000		1.93144	00.4215	-02.4624
0.65000	5.93902	1.94970	00.3140	-01.8647
0.70000	6.03686	1.96327	00.2327	-01.4051
0.75000	6.13529	1.97330	00.1717	-01.0534
0.80000	6.23415	1.98069	00.1260	-00.7857
0.85000	6.33333	1.98610	00.0920	-00.5830
0.90000	6.43274	1.99004	00.0669	-00.4304
0.95000	6.53231	1.99290	00.0484	-00.3160
1.00000	6.63201	1.99496	00.0348	-00.2309
0.05000	6.73180	1.99644	00.0249	-00.1678
1.10000	6.83165	1.99750	00.0178	-00.2223
1.15000	6.93155	1.99825	00.0126	-00.0873
1.20000	7.03147	1.99878	00.0089	-00.0624
1.25000	7.13142	1.99916	00.0062	-00.0445
1.30000	7.23139	1.99942	00.0044	-00.0325
1.35000	7.33136	1.99960	00.0030	-00.0222
1.40000	7.43135	1.99973	00.0021	-00.0155
1.45000	7.53133	1.99982	00.0014	-00.0108
1.50000	7.63133	1.99987	00.0010	-00.0075
1.55000	7.73132	1.99992	00.0007	-00.0052
1.60000	7.83132	1.99994	00.0005	-00.0036
1.65000	7.93132	1.99996	00.0003	-00.0024
1.70000	8.03131	1.99998	00.0002	-00.0017
1.75000	8.13131	1.99998	00.0001	-00.0011
1.80000	8.23131	1.99999	00.0001	-00.0008
1.85000	8.33131	1.99999	00.0001	-00.0005
1.90000	8.43131	2.00000	00.0000	-00.0003
1.95000	8.53131	2.00000	00.0000	-00.0002
2.00000	8.63131	2.00000	0000000	-00.0001

Table III (continued)/

Table III (continued)

$$f(0) = 6.00$$

$n$	$f$	$f'$	$f''$	$f'''$
0.00000	6.00000	0.00000		-73.8497
0.05000	6.01396	0.53161	09.1163	-54.8250
0.10000	6.05088	0.92514	06.7433	-40.8030
0.15000	6.10478	1.21595	04.9766	-30.3811
0.20000	6.17121	1.43026	03.6617	-22.5971
0.25000	6.24687	1.58769		-16.7704
0.30000	6.32928	1.70290	01.9605	-12.4085
0.35000	6.41664	1.78687	01.4256	-09.1476
0.40000	6.50759	1.84780	01.0320	-06.7161
0.45000	6.60114	1.89181	00.7437	-04.9092
0.50000	6.69657	1.92345	00.5334	-03.5718
0.55000	6.79334	1.94610	00.3807	-02.5863
0.60000	6.89107	1.96222	00.2704	-01.8635
0.65000	6.98948	1.97171	00.1911	-01.3360
0.70000	7.08838	1.97574	00.1344	-00.9530
0.75000	7.18761	1.98736	00.0941	-00.6763
0.80000	7.28709	1.99131	00.0655	-00.4775
0.85000	7.38673	1.99406	00.0454	-00.3354
0.90000	7.48648	1.99595	00.0313	-00.2344
0.95000	7.58631	1.99726	00.0215	-00.1630
1.00000	7.63620	1.99815	00.0147	-00.1127
1.05000	7.78612	1.99876	00.0100	-00.0776
1.10000	7.88607	1.99917	00.0067	-00.0531
1.15000	7.98604	1.99945	00.0045	-00.0362
1.20000	8.08601	1.99971	00.0030	-00.0245
1.25000	8.18600	1.99976	00.0020	-00.0165
1.30000	8.28599	1.99984	00.0013	-00.0111
1.35000	8.38598	1.99990	00.0009	-00.0074
1.40000	8.48598	1.99993	00.0006	-00.0049
1.45000	8.58598	1.99996	00.0004	-00.0032
1.50000	8.68597	1.99997	00.0002	-00.0021
1.55000	8.78597	1.99998	00.0002	-00.0014
1.60000	8.88597	1.99999	00.0001	-00.0009
1.65000	8.98597	1.99999	00.0001	-00.0006
1.70000	9.08597	2.00000	00.0000	-00.0004
1.75000	9.18597	2.00000	00.0000	-00.0002
1.80000	9.28597	2.00000	00.0000	-00.0002
1.85000	9.38597	2.00000	00.0000	-00.0001
1.90000	9.48597	2.00000	00.0000	-00.0001
1.95000	9.58597	2.00000	00.0000	-00.0000

Table III (continued)/

Table III (continued)

$f(0) = 10.00$

$\eta$	$f$	$f^2$	$f'''$	$f''''$
0.00000	10.0000	0.00000	20.1941	-201.9406
0.05000	10.0216	0.79401	12.2488	-122.7518
0.10000	10.0743	1.27525	07.4153	-074.7040
0.15000	10.1460	1.56619	04.4751	-045.4040
0.20000	10.2291	1.74147	02.6902	-027.5184
0.25000	10.3190	1.84663	01.6103	-016.6164
0.30000	10.4131	1.90944	00.9594	-009.9907
0.35000	10.5095	1.94678	00.5690	-005.9794
0.40000	10.6075	1.96888	00.3358	-003.5616
0.45000	10.7063	1.98189	00.1972	-002.1111
0.50000	10.8056	1.98951	00.1152	-001.2451
0.55000	10.9052	1.99395	00.0670	-000.7307
0.60000	11.0050	1.99653	00.0388	-000.4267
0.65000	11.1048	1.99802	00.0223	-000.2479
0.70000	11.2047	1.99888	00.0128	-000.1433
0.75000	11.3047	1.99936	00.0073	-000.0824
0.80000	11.4047	1.99964	00.0041	-000.0472
0.85000	11.5047	1.99980	00.0023	-000.0269
0.90000	11.6047	1.99989	00.0013	-000.0152
0.95000	11.7047	1.99994	00.0007	-000.0086
1.00000	11.8047	1.99997	00.0004	-000.0048
1.05000	11.9047	1.99998	00.0002	-000.0027
1.10000	12.0047	1.99999	00.0001	-000.0015
1.15000	12.1047	1.99997	00.0001	-000.0008
1.20000	12.2047	2.00000	00.0000	-000.0005
1.25000	12.3047	2.00000	00.0000	-000.0002
1.30000	12.4047	2.00000	00.0000	-000.0001
1.35000	12.5047	2.00000	00.0000	-000.0001
1.40000	12.6047	2.00000	00.0000	-000.0000

Fig 1

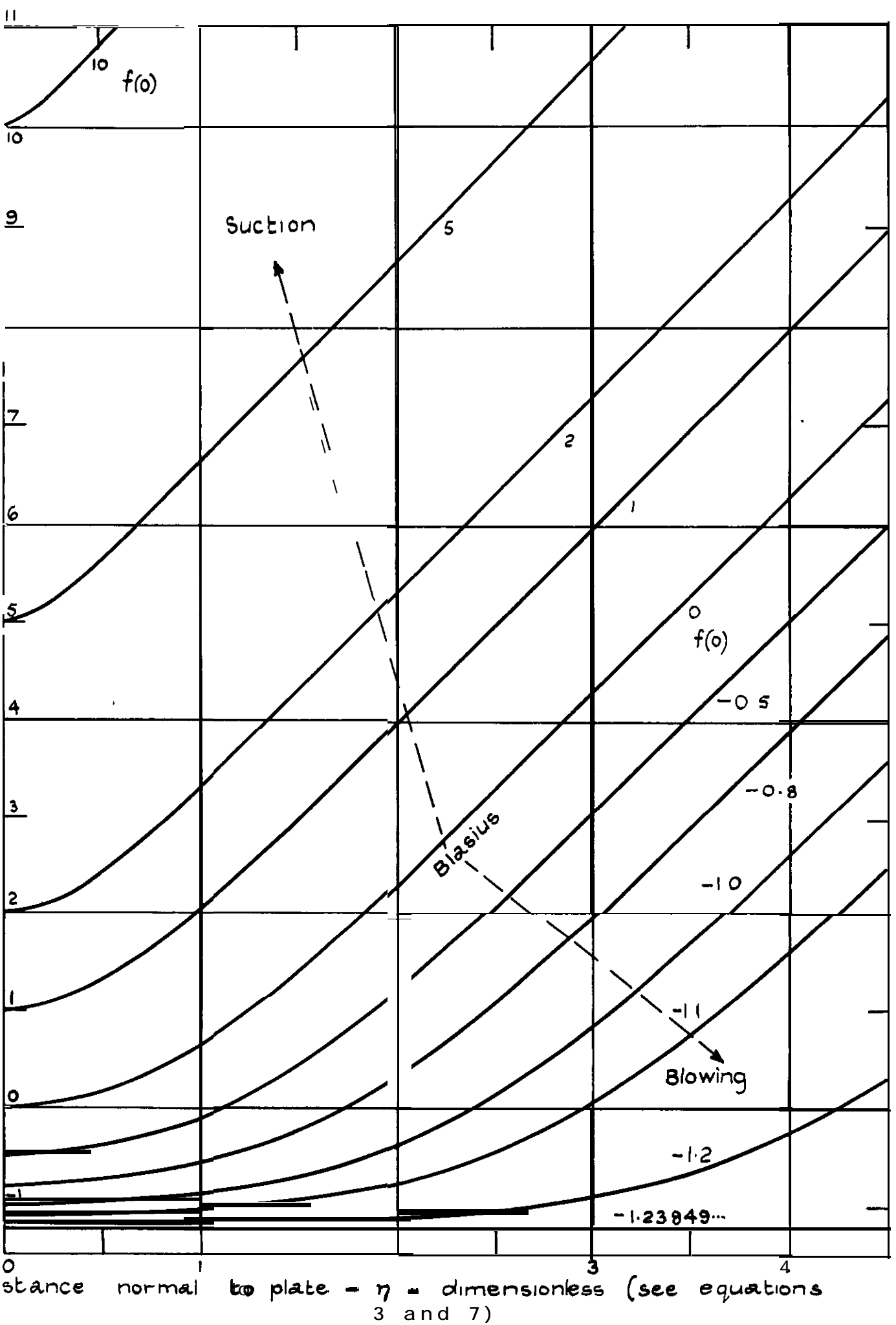


Fig. 2.

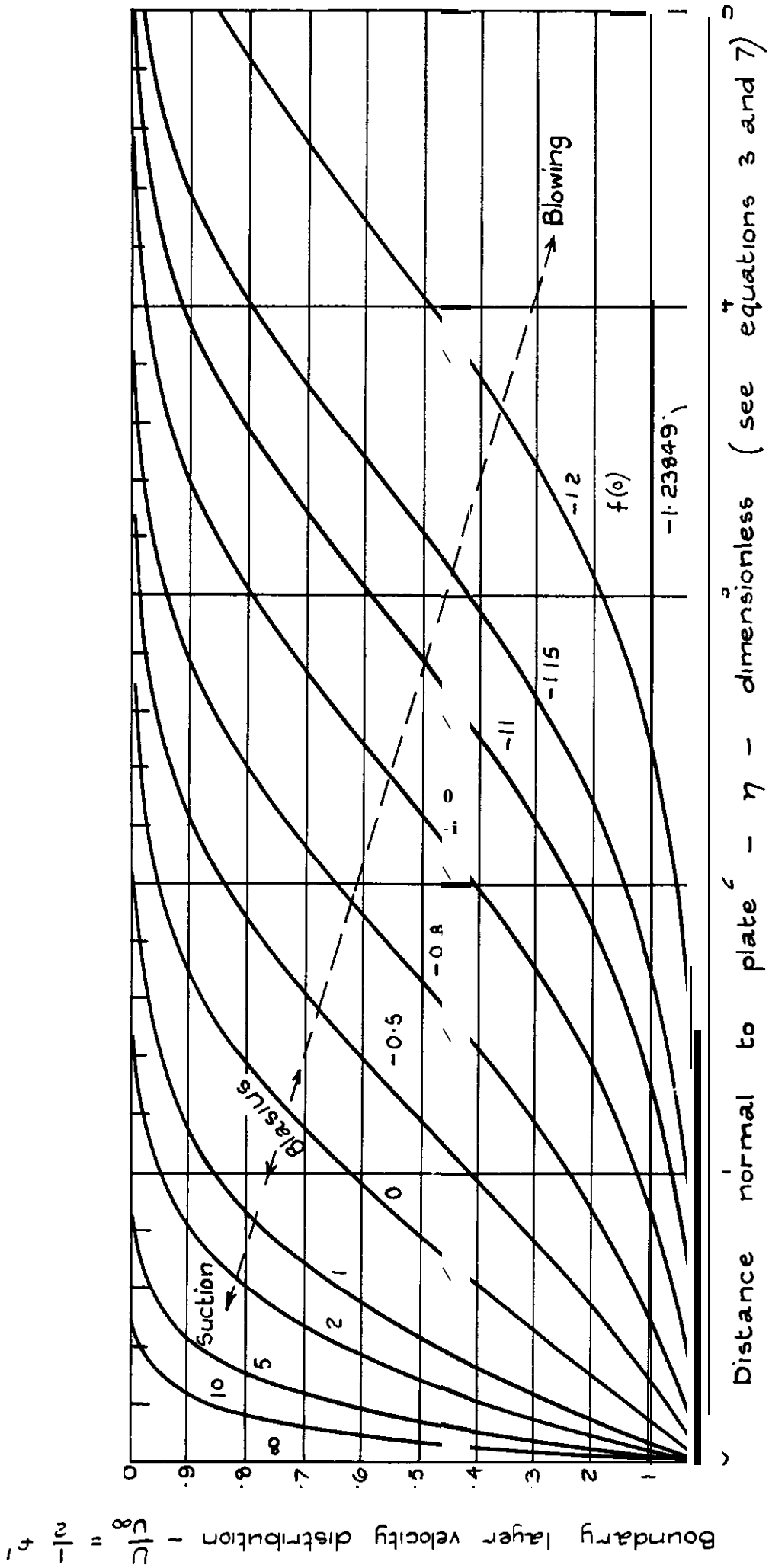
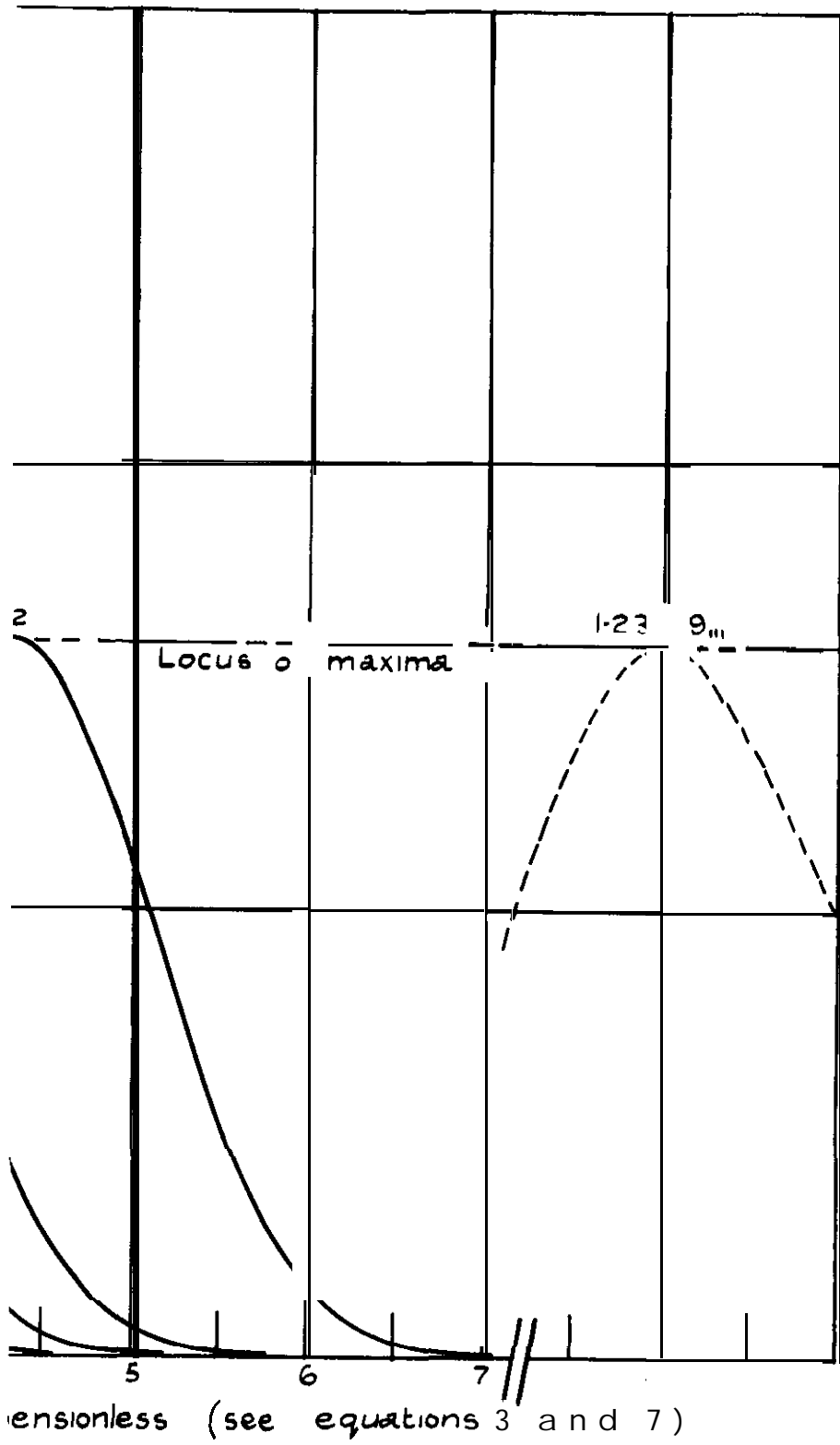




Fig 3







CROWN COPYRIGHT RESERVED

PRINTED AND PUBLISHED BY HER MAJESTY'S STATIONERY OFFICE

To be purchased from

York House, Kingsway, LONDON, W C.2    423 Oxford Street, LONDON, W 1  
P O Box 569, LONDON, S.E 1

13a Castle Street, EDINBURGH, 2    1 St Andrew's Crescent, CARDIFF  
39 King Street, MANCHESTER, 2    Tower Lane, BRISTOL, 1  
2 Edmund Street, BIRMINGHAM, 3    80 Chichester Street, BELFAST

or from any Bookseller

1954

Price 7s 0d net

PRINTED IN GREAT BRITAIN