

SINE, COSINE AND EXPONENTIAL INTEGRALS

Table 5.1

$x$	$Si(x)$	$Ci(x)$	$xe^{-x}Ei(x)$	$xe^xE_1(x)$
7.0	1.45459 66142	0.07669 52785	1.22240 8053	0.88648 7675
7.1	1.46443 32441	0.08690 68881	1.21770 9472	0.88778 5294
7.2	1.47508 90554	0.09595 70643	1.21316 6264	0.88905 3119
7.3	1.48643 64451	0.10378 86664	1.20877 3699	0.89029 2173
7.4	1.49834 47533	0.11035 76658	1.20452 7026	0.89150 3440
7.5	1.51068 15309	0.11563 32032	1.20042 1500	0.89268 7854
7.6	1.52331 37914	0.11959 75293	1.19645 2401	0.89384 6312
7.7	1.53610 92381	0.12224 58319	1.19261 5063	0.89497 9666
7.8	1.54893 74581	0.12358 59542	1.18890 4881	0.89608 8737
7.9	1.56167 10702	0.12363 80071	1.18531 7334	0.89717 4302
8.0	1.57418 68217	0.12243 38825	1.18184 7987	0.89823 7113
8.1	1.58636 66225	0.12001 66733	1.17849 2509	0.89927 7888
8.2	1.59809 85106	0.11644 00055	1.17524 6676	0.90029 7306
8.3	1.60927 75419	0.11176 72931	1.17210 6376	0.90129 6033
8.4	1.61980 65968	0.10607 09196	1.16906 7617	0.90227 4695
8.5	1.62959 70996	0.09943 13586	1.16612 6526	0.90323 3900
8.6	1.63856 96454	0.09193 62396	1.16327 9354	0.90417 4228
8.7	1.64665 45309	0.08367 93696	1.16052 2476	0.90509 6235
8.8	1.65379 21861	0.07475 97196	1.15785 2390	0.90600 0459
8.9	1.65993 35052	0.06528 03850	1.15526 5719	0.90688 7415
9.0	1.66504 00758	0.05534 75313	1.15275 9209	0.90775 7602
9.1	1.66908 43056	0.04506 93325	1.15032 9724	0.90861 1483
9.2	1.67204 94480	0.03455 49134	1.14797 4251	0.90944 9530
9.3	1.67392 95283	0.02391 33045	1.14568 9889	0.91027 2177
9.4	1.67472 91725	0.01325 24187	1.14347 3855	0.91107 9850
9.5	1.67446 33423	+0.00267 80588	1.14132 3476	0.91187 2958
9.6	1.67315 69801	-0.00770 70361	1.13923 6185	0.91265 1897
9.7	1.67084 45697	-0.01780 40977	1.13720 9523	0.91341 7043
9.8	1.66756 96169	-0.02751 91811	1.13524 1130	0.91416 8766
9.9	1.66338 40566	-0.03676 39563	1.13332 8746	0.91490 7418
10.0	1.65834 75942	-0.04545 64330	1.13147 0205	0.91563 3339
	$\left[ \begin{smallmatrix} (-4)1 \\ 7 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-4)2 \\ 7 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-5)2 \\ 5 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-6)4 \\ 4 \end{smallmatrix} \right]$

Table 5.2

SINE, COSINE AND EXPONENTIAL INTEGRALS FOR LARGE ARGUMENTS

$x^{-1}$	$xf(x)$	$x^2g(x)$	$xe^{-x}Ei(x)$	$xe^xE_1(x)$	$\langle x \rangle$
0.100	0.98191 0351	0.94885 39	1.13147 021	0.91563 33394	10
0.095	0.98353 4427	0.95323 18	1.12249 671	0.91925 68286	11
0.090	0.98509 9171	0.95748 44	1.11389 377	0.92293 15844	11
0.085	0.98660 1776	0.96160 17	1.10564 739	0.92665 90998	12
0.080	0.98803 9405	0.96557 23	1.09773 775	0.93044 09399	13
0.075	0.98940 9188	0.96938 56	1.09014 087	0.93427 87466	13
0.070	0.99070 8244	0.97302 98	1.08283 054	0.93817 42450	14
0.065	0.99193 3695	0.97649 35	1.07578 038	0.94212 92486	15
0.060	0.99308 2682	0.97976 47	1.06896 548	0.94614 56670	17
0.055	0.99415 2385	0.98283 17	1.06236 365	0.95022 55126	18
0.050	0.99514 0052	0.98568 24	1.05595 591	0.95437 09099	20
0.045	0.99604 3013	0.98830 52	1.04972 640	0.95858 41038	22
0.040	0.99685 8722	0.99068 81	1.04366 194	0.96286 74711	25
0.035	0.99758 4771	0.99282 12	1.03775 135	0.96722 35311	29
0.030	0.99821 8937	0.99469 37	1.03198 503	0.97165 49596	33
0.025	0.99875 9204	0.99629 57	1.02635 451	0.97616 46031	40
0.020	0.99920 3795	0.99761 89	1.02085 228	0.98075 54965	50
0.015	0.99955 1207	0.99865 60	1.01547 157	0.98543 08813	67
0.010	0.99980 0239	0.99940 12	1.01020 625	0.99019 42287	100
0.005	0.99995 0015	0.99985 01	1.00505 077	0.99504 92646	200
0.000	1.00000 0000	1.00000 00	1.00000 000	1.00000 00000	$\infty$
	$\left[ \begin{smallmatrix} (-5)1 \\ 5 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-5)4 \\ 4 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-5)5 \\ 6 \end{smallmatrix} \right]$	$\left[ \begin{smallmatrix} (-5)1 \\ 6 \end{smallmatrix} \right]$	
	$Si(x) = \frac{\pi}{2} - f(x) \cos x - g(x) \sin x$		$Ci(x) = f(x) \sin x - g(x) \cos x$		
	$\frac{\pi}{2} = 1.57079 63268$				$\langle x \rangle =$ nearest integer to $x$ .

See Example 3.