

| x   |        | sin(x) | cos(x) | tan(x)  | cot(x) | csc(x) | sec(x)  |
|-----|--------|--------|--------|---------|--------|--------|---------|
| deg | rad    |        |        |         |        |        |         |
| 46  | 0.8029 | 0.7193 | 0.6947 | 1.0355  | 0.9657 | 1.3902 | 1.4396  |
| 47  | 0.8203 | 0.7314 | 0.6820 | 1.0724  | 0.9325 | 1.3673 | 1.4663  |
| 48  | 0.8378 | 0.7431 | 0.6691 | 1.1106  | 0.9004 | 1.3456 | 1.4945  |
| 49  | 0.8552 | 0.7547 | 0.6561 | 1.1504  | 0.8693 | 1.3250 | 1.5243  |
| 50  | 0.8727 | 0.7660 | 0.6428 | 1.1918  | 0.8391 | 1.3054 | 1.5557  |
| 51  | 0.8901 | 0.7771 | 0.6293 | 1.2349  | 0.8098 | 1.2868 | 1.5890  |
| 52  | 0.9076 | 0.7880 | 0.6157 | 1.2799  | 0.7813 | 1.2690 | 1.6243  |
| 53  | 0.925  | 0.7986 | 0.6018 | 1.3270  | 0.7536 | 1.2521 | 1.6616  |
| 54  | 0.9425 | 0.8090 | 0.5878 | 1.3764  | 0.7265 | 1.2361 | 1.7013  |
| 55  | 0.9599 | 0.8192 | 0.5736 | 1.4281  | 0.7002 | 1.2208 | 1.7434  |
| 56  | 0.9774 | 0.8290 | 0.5592 | 1.4826  | 0.6745 | 1.2062 | 1.7883  |
| 57  | 0.9948 | 0.8387 | 0.5446 | 1.5399  | 0.6494 | 1.1924 | 1.8361  |
| 58  | 1.0123 | 0.8480 | 0.5299 | 1.6003  | 0.6249 | 1.1792 | 1.8871  |
| 59  | 1.0297 | 0.8572 | 0.5150 | 1.6643  | 0.6009 | 1.1666 | 1.9416  |
| 60  | 1.0472 | 0.8660 | 0.5000 | 1.7321  | 0.5774 | 1.1547 | 2.0000  |
| 61  | 1.0647 | 0.8746 | 0.4848 | 1.8040  | 0.5543 | 1.1434 | 2.0627  |
| 62  | 1.0821 | 0.8829 | 0.4695 | 1.8807  | 0.5317 | 1.1326 | 2.1301  |
| 63  | 1.0996 | 0.8910 | 0.4540 | 1.9626  | 0.5095 | 1.1223 | 2.2027  |
| 64  | 1.117  | 0.8988 | 0.4384 | 2.0503  | 0.4877 | 1.1126 | 2.2812  |
| 65  | 1.1345 | 0.9063 | 0.4226 | 2.1445  | 0.4663 | 1.1034 | 2.3662  |
| 66  | 1.1519 | 0.9135 | 0.4067 | 2.2460  | 0.4452 | 1.0946 | 2.4586  |
| 67  | 1.1694 | 0.9205 | 0.3907 | 2.3559  | 0.4245 | 1.0864 | 2.5593  |
| 68  | 1.1868 | 0.9272 | 0.3746 | 2.4751  | 0.4040 | 1.0785 | 2.6695  |
| 69  | 1.2043 | 0.9336 | 0.3584 | 2.6051  | 0.3839 | 1.0711 | 2.7904  |
| 70  | 1.2217 | 0.9397 | 0.3420 | 2.7475  | 0.3640 | 1.0642 | 2.9238  |
| 71  | 1.2392 | 0.9455 | 0.3256 | 2.9042  | 0.3443 | 1.0576 | 3.0716  |
| 72  | 1.2566 | 0.9511 | 0.3090 | 3.0777  | 0.3249 | 1.0515 | 3.2361  |
| 73  | 1.2741 | 0.9563 | 0.2924 | 3.2709  | 0.3057 | 1.0457 | 3.4203  |
| 74  | 1.2915 | 0.9613 | 0.2756 | 3.4874  | 0.2867 | 1.0403 | 3.6280  |
| 75  | 1.309  | 0.9659 | 0.2588 | 3.7321  | 0.2679 | 1.0353 | 3.8637  |
| 76  | 1.3265 | 0.9703 | 0.2419 | 4.0108  | 0.2493 | 1.0306 | 4.1336  |
| 77  | 1.3439 | 0.9744 | 0.2250 | 4.3315  | 0.2309 | 1.0263 | 4.4454  |
| 78  | 1.3614 | 0.9781 | 0.2079 | 4.7046  | 0.2126 | 1.0223 | 4.8097  |
| 79  | 1.3788 | 0.9816 | 0.1908 | 5.1446  | 0.1944 | 1.0187 | 5.2408  |
| 80  | 1.3963 | 0.9848 | 0.1736 | 5.6713  | 0.1763 | 1.0154 | 5.7588  |
| 81  | 1.4137 | 0.9877 | 0.1564 | 6.3138  | 0.1584 | 1.0125 | 6.3925  |
| 82  | 1.4312 | 0.9903 | 0.1392 | 7.1154  | 0.1405 | 1.0098 | 7.1853  |
| 83  | 1.4486 | 0.9925 | 0.1219 | 8.1443  | 0.1228 | 1.0075 | 8.2055  |
| 84  | 1.4661 | 0.9945 | 0.1045 | 9.5144  | 0.1051 | 1.0055 | 9.5668  |
| 85  | 1.4835 | 0.9962 | 0.0872 | 11.4301 | 0.0875 | 1.0038 | 11.4737 |
| 86  | 1.501  | 0.9976 | 0.0698 | 14.3007 | 0.0699 | 1.0024 | 14.3356 |
| 87  | 1.5184 | 0.9986 | 0.0523 | 19.0811 | 0.0524 | 1.0014 | 19.1073 |
| 88  | 1.5359 | 0.9994 | 0.0349 | 28.6363 | 0.0349 | 1.0006 | 28.6537 |
| 89  | 1.5533 | 0.9998 | 0.0175 | 57.2900 | 0.0175 | 1.0002 | 57.2987 |
| 90  | 1.5708 | 1.0000 | 0.0000 |         | 0.0000 | 1.0000 |         |