

Value of $J_n(\beta)$

| | | β | | | | | | | | | | | | | | | | | | | |
|---|----|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | 1 | 1.5 | 2 | 2.5 | 3 | 4 | 5 | 6 | 8 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 | 150 |
| n | 0 | 0.7652 | 0.5118 | 0.2239 | -0.0484 | -0.2601 | -0.3971 | -0.1776 | 0.1506 | 0.1717 | -0.2459 | -0.0142 | 0.1670 | 0.0963 | -0.0864 | 0.0074 | 0.0558 | -0.0915 | -0.0697 | 0.0200 | -0.0008 |
| | 1 | 0.4401 | 0.5579 | 0.5767 | 0.4971 | 0.3391 | -0.0660 | -0.3276 | -0.2767 | 0.2346 | 0.0435 | 0.2051 | 0.0668 | -0.1254 | -0.1188 | 0.1260 | -0.0975 | 0.0466 | -0.0561 | -0.0771 | -0.0651 |
| | 2 | 0.1149 | 0.2321 | 0.3528 | 0.4461 | 0.4861 | 0.3641 | 0.0466 | -0.2429 | -0.1130 | 0.2546 | 0.0416 | -0.1603 | -0.1063 | 0.0785 | -0.0011 | -0.0597 | 0.0930 | 0.0683 | -0.0215 | -0.0001 |
| | 3 | 0.0196 | 0.0610 | 0.1289 | 0.2166 | 0.3091 | 0.4302 | 0.3648 | 0.1148 | -0.2911 | 0.0584 | -0.1940 | -0.0989 | 0.1083 | 0.1292 | -0.1261 | 0.0927 | -0.0404 | 0.0595 | 0.0763 | 0.0651 |
| | 4 | 0.0025 | 0.0118 | 0.0340 | 0.0738 | 0.1320 | 0.2811 | 0.3912 | 0.3576 | -0.1054 | -0.2196 | -0.1192 | 0.1307 | 0.1323 | -0.0526 | -0.0179 | 0.0708 | -0.0971 | -0.0639 | 0.0261 | 0.0027 |
| | 5 | 0.0002 | 0.0018 | 0.0070 | 0.0195 | 0.0430 | 0.1321 | 0.2611 | 0.3621 | 0.1858 | -0.2341 | 0.1305 | 0.1512 | -0.0660 | -0.1432 | 0.1226 | -0.0814 | 0.0275 | -0.0659 | -0.0742 | -0.0650 |
| | 6 | 0 | 0.0002 | 0.0012 | 0.0042 | 0.0114 | 0.0491 | 0.1310 | 0.2458 | 0.3376 | -0.0145 | 0.2061 | -0.0551 | -0.1587 | 0.0049 | 0.0485 | -0.0871 | 0.1016 | 0.0556 | -0.0335 | -0.0070 |
| | 7 | 0 | 0 | 0.0002 | 0.0008 | 0.0025 | 0.0152 | 0.0534 | 0.1296 | 0.3206 | 0.2167 | 0.0345 | -0.1842 | -0.0102 | 0.1452 | -0.1080 | 0.0605 | -0.0071 | 0.0742 | 0.0702 | 0.0644 |
| | 8 | 0 | 0 | 0 | 0.0001 | 0.0005 | 0.0040 | 0.0184 | 0.0565 | 0.2235 | 0.3179 | -0.1740 | -0.0739 | 0.1530 | 0.0629 | -0.0863 | 0.1041 | -0.1033 | -0.0427 | 0.0433 | 0.0130 |
| | 9 | 0 | 0 | 0 | 0 | 0.0001 | 0.0009 | 0.0055 | 0.0212 | 0.1263 | 0.2919 | -0.2200 | 0.1251 | 0.1081 | -0.1116 | 0.0735 | -0.0272 | -0.0204 | -0.0827 | -0.0632 | -0.0630 |
| | 10 | 0 | 0 | 0 | 0 | 0 | 0.0002 | 0.0015 | 0.0070 | 0.0608 | 0.2075 | -0.0901 | 0.1865 | -0.0752 | -0.1299 | 0.1194 | -0.1138 | 0.0972 | 0.0240 | -0.0547 | -0.0206 |
| | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0004 | 0.0020 | 0.0256 | 0.1231 | 0.1000 | 0.0614 | -0.1682 | 0.0251 | -0.0138 | -0.0183 | 0.0528 | 0.0888 | 0.0523 | 0.0603 |
| | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0005 | 0.0096 | 0.0634 | 0.2367 | -0.1190 | -0.0729 | 0.1483 | -0.1270 | 0.1058 | -0.0778 | 0.0004 | 0.0662 | 0.0295 |
| | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0033 | 0.0290 | 0.2787 | -0.2041 | 0.0983 | 0.0935 | -0.0624 | 0.0691 | -0.0839 | -0.0886 | -0.0364 | -0.0556 |
| | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0010 | 0.0120 | 0.2464 | -0.1464 | 0.1751 | -0.0672 | 0.0864 | -0.0698 | 0.0414 | -0.0292 | -0.0757 | -0.0391 |
| | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0003 | 0.0045 | 0.1813 | -0.0008 | 0.0978 | -0.1562 | 0.1229 | -0.1082 | 0.1033 | 0.0784 | 0.0152 | 0.0483 |
| | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0016 | 0.1162 | 0.1452 | -0.0577 | -0.0891 | 0.0057 | 0.0049 | 0.0102 | 0.0586 | 0.0803 | 0.0487 |
| | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0005 | 0.0665 | 0.2331 | -0.1717 | 0.0612 | -0.1183 | 0.1114 | -0.0978 | -0.0550 | 0.0105 | -0.0379 |
| | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0002 | 0.0346 | 0.2511 | -0.1758 | 0.1585 | -0.1063 | 0.0708 | -0.0656 | -0.0820 | -0.0767 | -0.0573 |
| | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0166 | 0.2189 | -0.0814 | 0.1289 | 0.0226 | -0.0604 | 0.0585 | 0.0181 | -0.0381 | 0.0241 |
| | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0074 | 0.1647 | 0.0520 | 0.0048 | 0.1278 | -0.1167 | 0.1027 | 0.0906 | 0.0622 | 0.0634 |
| | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0031 | 0.1106 | 0.1646 | -0.1225 | 0.1051 | -0.0330 | 0.0100 | 0.0272 | 0.0630 | -0.0072 |
| | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0012 | 0.0676 | 0.2246 | -0.1763 | -0.0174 | 0.0890 | -0.0957 | -0.0763 | -0.0358 | -0.0655 |
| | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0004 | 0.0380 | 0.2306 | -0.1361 | -0.1243 | 0.1113 | -0.0801 | -0.0691 | -0.0787 | -0.0120 |
| | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0002 | 0.0199 | 0.1998 | -0.0324 | -0.1255 | 0.0134 | 0.0342 | 0.0366 | -0.0004 | 0.0618 |
| | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0098 | 0.1529 | 0.0843 | -0.0264 | -0.0984 | 0.1075 | 0.0911 | 0.0785 | 0.0318 |
| | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0045 | 0.1061 | 0.1729 | 0.0926 | -0.1118 | 0.0554 | 0.0204 | 0.0397 | -0.0512 |
| | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0020 | 0.0678 | 0.2153 | 0.1467 | -0.0179 | -0.0595 | -0.0778 | -0.0579 | -0.0495 |
| | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0008 | 0.0403 | 0.2148 | 0.1055 | 0.0925 | -0.1090 | -0.0729 | -0.0709 | 0.0334 |
| | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0003 | 0.0225 | 0.1855 | 0.0010 | 0.1215 | -0.0422 | 0.0268 | 0.0181 | 0.0620 |
| | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0118 | 0.1439 | -0.1041 | 0.0484 | 0.0682 | 0.0923 | 0.0815 | -0.0094 |
| | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0059 | 0.1023 | -0.1571 | -0.0634 | 0.1104 | 0.0424 | 0.0307 | -0.0657 |
| | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0028 | 0.0676 | -0.1394 | -0.1270 | 0.0458 | -0.0594 | -0.0624 | -0.0178 |
| | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0013 | 0.0418 | -0.0660 | -0.0992 | -0.0615 | -0.0900 | -0.0707 | 0.0582 |
| | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0006 | 0.0244 | 0.0306 | -0.0039 | -0.1135 | -0.0148 | 0.0158 | 0.0434 |
| | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0002 | 0.0135 | 0.1179 | 0.0939 | -0.0671 | 0.0774 | 0.0814 | -0.0385 |
| | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0071 | 0.1758 | 0.1354 | 0.0352 | 0.0825 | 0.0412 | -0.0613 |
| | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0036 | 0.1985 | 0.1010 | 0.1093 | -0.0031 | -0.0517 | 0.0091 | |
| | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0017 | 0.1915 | 0.0142 | 0.0996 | -0.0854 | -0.0795 | 0.0658 | |
| | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0008 | 0.1653 | -0.0795 | 0.0169 | -0.0780 | -0.0087 | 0.0243 | |
| | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0004 | 0.1308 | -0.1382 | -0.0776 | 0.0093 | 0.0727 | -0.0532 | |
| | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0002 | 0.0963 | -0.1416 | -0.1205 | 0.0874 | 0.0669 | -0.0526 | |
| | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0001 | 0.0666 | -0.0940 | -0.0870 | 0.0802 | -0.0179 | 0.0244 | |