

Table of Beta distribution.

Critical values x such that $F(x) = \mathbf{P}\{X \leq x\} = p$ for the Beta(a, b) random variable X

| a | p | b | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 1 | .2 | .2 | .11 | .07 | .05 | .04 | .04 | .03 | .03 | .02 | .02 | .02 | .02 | .02 | .02 | .01 | .01 | .01 | .01 | .01 | .01 |
| | .3 | .3 | .16 | .11 | .09 | .07 | .06 | .05 | .04 | .04 | .04 | .03 | .03 | .03 | .03 | .02 | .02 | .02 | .02 | .02 | .02 |
| | .5 | .5 | .29 | .21 | .16 | .13 | .11 | .09 | .08 | .07 | .07 | .06 | .06 | .05 | .05 | .05 | .04 | .04 | .04 | .04 | .03 |
| | .8 | .8 | .55 | .42 | .33 | .28 | .24 | .21 | .18 | .16 | .15 | .14 | .13 | .12 | .11 | .1 | .1 | .09 | .09 | .08 | .08 |
| | .9 | .9 | .68 | .54 | .44 | .37 | .32 | .28 | .25 | .23 | .21 | .19 | .17 | .16 | .15 | .14 | .13 | .13 | .12 | .11 | .11 |
| 2 | .2 | .45 | .29 | .21 | .17 | .14 | .12 | .1 | .09 | .08 | .08 | .07 | .06 | .06 | .06 | .05 | .05 | .05 | .04 | .04 | .04 |
| | .3 | .55 | .36 | .27 | .22 | .18 | .16 | .14 | .12 | .11 | .1 | .09 | .08 | .08 | .07 | .07 | .06 | .06 | .06 | .05 | .05 |
| | .5 | .71 | .5 | .39 | .31 | .26 | .23 | .2 | .18 | .16 | .15 | .14 | .13 | .12 | .11 | .1 | .1 | .09 | .09 | .08 | .08 |
| | .8 | .89 | .71 | .58 | .49 | .42 | .37 | .33 | .3 | .27 | .25 | .23 | .21 | .2 | .19 | .18 | .17 | .16 | .15 | .14 | .14 |
| | .9 | .95 | .8 | .68 | .58 | .51 | .45 | .41 | .37 | .34 | .31 | .29 | .27 | .25 | .24 | .22 | .21 | .2 | .19 | .18 | .17 |
| 3 | .2 | .58 | .42 | .33 | .27 | .23 | .2 | .18 | .16 | .14 | .13 | .12 | .11 | .1 | .1 | .09 | .09 | .08 | .08 | .07 | .07 |
| | .3 | .67 | .49 | .39 | .32 | .28 | .24 | .21 | .19 | .17 | .16 | .15 | .14 | .13 | .12 | .11 | .11 | .1 | .1 | .09 | .09 |
| | .5 | .79 | .61 | .5 | .42 | .36 | .32 | .29 | .26 | .24 | .22 | .2 | .19 | .17 | .16 | .15 | .15 | .14 | .13 | .13 | .12 |
| | .8 | .93 | .79 | .67 | .59 | .52 | .46 | .42 | .38 | .35 | .32 | .3 | .28 | .26 | .25 | .24 | .22 | .21 | .2 | .19 | .18 |
| | .9 | .97 | .86 | .75 | .67 | .6 | .54 | .49 | .45 | .42 | .39 | .36 | .34 | .32 | .3 | .28 | .27 | .26 | .24 | .23 | .22 |
| 4 | .2 | .67 | .51 | .41 | .35 | .3 | .27 | .24 | .22 | .2 | .18 | .17 | .16 | .15 | .14 | .13 | .12 | .12 | .11 | .11 | .1 |
| | .3 | .74 | .58 | .48 | .41 | .35 | .31 | .28 | .25 | .23 | .22 | .2 | .19 | .17 | .16 | .15 | .15 | .14 | .13 | .13 | .12 |
| | .5 | .84 | .69 | .58 | .5 | .44 | .39 | .36 | .32 | .3 | .28 | .26 | .24 | .22 | .21 | .2 | .19 | .18 | .17 | .16 | .16 |
| | .8 | .95 | .83 | .73 | .65 | .58 | .53 | .48 | .45 | .41 | .38 | .36 | .34 | .32 | .3 | .29 | .27 | .26 | .25 | .24 | .23 |
| | .9 | .97 | .89 | .8 | .72 | .66 | .6 | .55 | .51 | .48 | .44 | .42 | .39 | .37 | .35 | .33 | .32 | .3 | .29 | .28 | .27 |
| 5 | .2 | .72 | .58 | .48 | .42 | .37 | .33 | .3 | .27 | .25 | .23 | .21 | .2 | .19 | .18 | .17 | .16 | .15 | .14 | .14 | .13 |
| | .3 | .79 | .64 | .54 | .47 | .42 | .37 | .34 | .31 | .28 | .26 | .25 | .23 | .22 | .2 | .19 | .18 | .17 | .17 | .16 | .15 |
| | .5 | .87 | .74 | .64 | .56 | .5 | .45 | .41 | .38 | .35 | .33 | .3 | .29 | .27 | .25 | .24 | .23 | .22 | .21 | .2 | .19 |
| | .8 | .96 | .86 | .77 | .7 | .63 | .58 | .54 | .5 | .46 | .43 | .41 | .38 | .36 | .35 | .33 | .31 | .3 | .29 | .28 | .26 |
| | .9 | .98 | .91 | .83 | .76 | .7 | .65 | .6 | .56 | .52 | .49 | .46 | .44 | .42 | .4 | .38 | .36 | .35 | .33 | .32 | .31 |
| 6 | .2 | .76 | .63 | .54 | .47 | .42 | .38 | .34 | .32 | .29 | .27 | .25 | .24 | .22 | .21 | .2 | .19 | .18 | .17 | .17 | .16 |
| | .3 | .82 | .69 | .59 | .52 | .47 | .42 | .39 | .36 | .33 | .31 | .29 | .27 | .26 | .24 | .23 | .22 | .21 | .2 | .19 | .18 |
| | .5 | .89 | .77 | .68 | .61 | .55 | .5 | .46 | .43 | .4 | .37 | .35 | .33 | .31 | .29 | .28 | .27 | .25 | .24 | .23 | .22 |
| | .8 | .96 | .88 | .8 | .73 | .67 | .62 | .58 | .54 | .51 | .48 | .45 | .43 | .4 | .38 | .37 | .35 | .34 | .32 | .31 | .3 |
| | .9 | .98 | .92 | .85 | .79 | .73 | .68 | .64 | .6 | .56 | .53 | .5 | .48 | .46 | .43 | .41 | .4 | .38 | .37 | .35 | .34 |
| 7 | .2 | .79 | .67 | .58 | .52 | .46 | .42 | .39 | .36 | .33 | .31 | .29 | .27 | .26 | .25 | .23 | .22 | .21 | .2 | .19 | .19 |
| | .3 | .84 | .72 | .63 | .57 | .51 | .47 | .43 | .4 | .37 | .35 | .33 | .31 | .29 | .28 | .26 | .25 | .24 | .23 | .22 | .21 |
| | .5 | .91 | .8 | .71 | .64 | .59 | .54 | .5 | .47 | .43 | .41 | .38 | .36 | .34 | .33 | .31 | .3 | .29 | .27 | .26 | .25 |
| | .8 | .97 | .9 | .82 | .76 | .7 | .66 | .61 | .58 | .54 | .51 | .48 | .46 | .44 | .42 | .4 | .38 | .37 | .35 | .34 | .33 |
| | .9 | .99 | .93 | .87 | .81 | .76 | .71 | .67 | .63 | .6 | .57 | .54 | .51 | .49 | .47 | .45 | .43 | .41 | .4 | .38 | .37 |
| 8 | .2 | .82 | .7 | .62 | .55 | .5 | .46 | .42 | .39 | .37 | .34 | .32 | .31 | .29 | .28 | .26 | .25 | .24 | .23 | .22 | .21 |
| | .3 | .86 | .75 | .67 | .6 | .55 | .5 | .47 | .43 | .41 | .38 | .36 | .34 | .32 | .31 | .29 | .28 | .27 | .26 | .25 | .24 |
| | .5 | .92 | .82 | .74 | .68 | .62 | .57 | .53 | .5 | .47 | .44 | .42 | .4 | .38 | .36 | .34 | .33 | .32 | .3 | .29 | .28 |
| | .8 | .97 | .91 | .84 | .78 | .73 | .68 | .64 | .61 | .57 | .54 | .52 | .49 | .47 | .45 | .43 | .41 | .4 | .38 | .37 | .36 |
| | .9 | .99 | .94 | .88 | .83 | .78 | .74 | .7 | .66 | .62 | .59 | .57 | .54 | .52 | .5 | .48 | .46 | .44 | .43 | .41 | .4 |
| 9 | .2 | .84 | .73 | .65 | .59 | .54 | .49 | .46 | .43 | .4 | .38 | .36 | .34 | .32 | .3 | .29 | .28 | .27 | .26 | .25 | .24 |
| | .3 | .87 | .77 | .69 | .63 | .58 | .54 | .5 | .47 | .44 | .41 | .39 | .37 | .35 | .34 | .32 | .31 | .29 | .28 | .27 | .26 |
| | .5 | .93 | .84 | .76 | .7 | .65 | .6 | .57 | .53 | .5 | .47 | .45 | .43 | .41 | .39 | .37 | .36 | .34 | .33 | .32 | .31 |
| | .8 | .98 | .92 | .86 | .8 | .75 | .71 | .67 | .63 | .6 | .57 | .54 | .52 | .5 | .48 | .46 | .44 | .42 | .41 | .39 | .38 |
| | .9 | .99 | .95 | .9 | .85 | .8 | .76 | .72 | .68 | .65 | .62 | .59 | .57 | .54 | .52 | .5 | .48 | .47 | .45 | .44 | .42 |
| 10 | .2 | .85 | .75 | .68 | .62 | .57 | .52 | .49 | .46 | .43 | .41 | .38 | .36 | .35 | .33 | .32 | .3 | .29 | .28 | .27 | .26 |
| | .3 | .89 | .79 | .72 | .66 | .61 | .56 | .53 | .5 | .47 | .44 | .42 | .4 | .38 | .36 | .35 | .33 | .32 | .31 | .3 | .29 |
| | .5 | .93 | .85 | .78 | .72 | .67 | .63 | .59 | .56 | .53 | .5 | .48 | .45 | .43 | .41 | .4 | .38 | .37 | .35 | .34 | .33 |
| | .8 | .98 | .92 | .87 | .82 | .77 | .73 | .69 | .66 | .62 | .59 | .57 | .54 | .52 | .5 | .48 | .46 | .45 | .43 | .42 | .4 |
| | .9 | .99 | .95 | .9 | .86 | .81 | .77 | .74 | .7 | .67 | .64 | .62 | .59 | .57 | .55 | .53 | .51 | .49 | .47 | .46 | .45 |