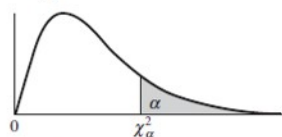


How to use Chi-Sq Table

March 17, 2022 10:42 AM

Ex//: $P(\chi^2_{df=6} > 1.237347) = 0.975$

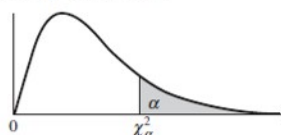
Table 6 Percentage Points of the χ^2 Distributions



| df | $\chi^2_{0.995}$ | $\chi^2_{0.990}$ | $\chi^2_{0.975}$ | $\chi^2_{0.950}$ | $\chi^2_{0.900}$ |
|----|------------------|------------------|------------------|------------------|------------------|
| 1 | 0.0000393 | 0.0001571 | 0.0009821 | 0.0039321 | 0.0157908 |
| 2 | 0.0100251 | 0.0201007 | 0.0506356 | 0.102587 | 0.210720 |
| 3 | 0.0717212 | 0.114832 | 0.215795 | 0.351846 | 0.584375 |
| 4 | 0.206990 | 0.297110 | 0.484419 | 0.710721 | 1.063623 |
| 5 | 0.411740 | 0.554300 | 0.831211 | 1.145476 | 1.61031 |
| 6 | 0.675727 | 0.872085 | 1.237347 | 1.63539 | 2.20413 |
| 7 | 0.989265 | 1.239043 | 1.68987 | 2.16735 | 2.83311 |
| 8 | 1.344419 | 1.646482 | 2.17973 | 2.73264 | 3.48954 |
| 9 | 1.734926 | 2.087912 | 2.70039 | 3.32511 | 4.16816 |
| 10 | 2.15585 | 2.55821 | 3.24697 | 3.94030 | 4.86518 |
| 11 | 2.60321 | 3.05347 | 3.81575 | 4.57481 | 5.57779 |
| 12 | 3.07382 | 3.57056 | 4.40379 | 5.22603 | 6.30380 |
| 13 | 3.56503 | 4.10691 | 5.00874 | 5.89186 | 7.04150 |
| 14 | 4.07468 | 4.66043 | 5.62872 | 6.57063 | 7.78953 |

Ex//: $P(\chi^2_{df=6} > a) = 0.9$

Table 6 Percentage Points of the χ^2 Distributions



| df | $\chi^2_{0.995}$ | $\chi^2_{0.990}$ | $\chi^2_{0.975}$ | $\chi^2_{0.950}$ | $\chi^2_{0.900}$ |
|----|------------------|------------------|------------------|------------------|------------------|
| 1 | 0.0000393 | 0.0001571 | 0.0009821 | 0.0039321 | 0.0157908 |
| 2 | 0.0100251 | 0.0201007 | 0.0506356 | 0.102587 | 0.210720 |
| 3 | 0.0717212 | 0.114832 | 0.215795 | 0.351846 | 0.584375 |
| 4 | 0.206990 | 0.297110 | 0.484419 | 0.710721 | 1.063623 |
| 5 | 0.411740 | 0.554300 | 0.831211 | 1.145476 | 1.61031 |
| 6 | 0.675727 | 0.872085 | 1.237347 | 1.63539 | 2.20413 |
| 7 | 0.989265 | 1.239043 | 1.68987 | 2.16735 | 2.83311 |
| 8 | 1.344419 | 1.646482 | 2.17973 | 2.73264 | 3.48954 |
| 9 | 1.734926 | 2.087912 | 2.70039 | 3.32511 | 4.16816 |
| 10 | 2.15585 | 2.55821 | 3.24697 | 3.94030 | 4.86518 |
| 11 | 2.60321 | 3.05347 | 3.81575 | 4.57481 | 5.57779 |
| 12 | 3.07382 | 3.57056 | 4.40379 | 5.22603 | 6.30380 |
| 13 | 3.56503 | 4.10691 | 5.00874 | 5.89186 | 7.04150 |
| 14 | 4.07468 | 4.66043 | 5.62872 | 6.57063 | 7.78953 |

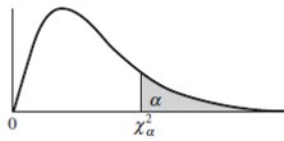
$a = 2.20413$

Ex// $P(\chi^2_{df=4} < 0.710721)$
 $= 1 - P(\chi^2_{df=4} > 0.710721)$

$$= 1 - P(\chi^2_{df=4} > 0.710721)$$

$$= 1 - 0.950 = 0.05$$

Table 6 Percentage Points of the χ^2 Distributions



| df | $\chi^2_{0.995}$ | $\chi^2_{0.990}$ | $\chi^2_{0.975}$ | $\chi^2_{0.950}$ | $\chi^2_{0.900}$ |
|----|------------------|------------------|------------------|------------------|------------------|
| 1 | 0.0000393 | 0.0001571 | 0.0009821 | 0.0039321 | 0.0157908 |
| 2 | 0.0100251 | 0.0201007 | 0.0506356 | 0.102587 | 0.210720 |
| 3 | 0.0717212 | 0.114832 | 0.215795 | 0.351846 | 0.584375 |
| 4 | 0.206990 | 0.297110 | 0.484419 | 0.710721 | 1.063623 |
| 5 | 0.411740 | 0.554300 | 0.831211 | 1.145476 | 1.61031 |
| 6 | 0.675727 | 0.872085 | 1.237347 | 1.63539 | 2.20413 |
| 7 | 0.989265 | 1.239043 | 1.68987 | 2.16735 | 2.83311 |
| 8 | 1.344419 | 1.646482 | 2.17973 | 2.73264 | 3.48954 |
| 9 | 1.734926 | 2.087912 | 2.70039 | 3.32511 | 4.16816 |
| 10 | 2.15585 | 2.55821 | 3.24697 | 3.94030 | 4.86518 |
| 11 | 2.60321 | 3.05347 | 3.81575 | 4.57481 | 5.57779 |
| 12 | 3.07382 | 3.57056 | 4.40379 | 5.22603 | 6.30380 |
| 13 | 3.56503 | 4.10691 | 5.00874 | 5.89186 | 7.04150 |
| 14 | 4.07468 | 4.66043 | 5.62872 | 6.57063 | 7.78953 |

Remark: W/o symmetry, you cannot manipulate chisq. the same way as t and z. Be more careful when practicing w/ these.