In [13]:

*#* 연습문제 *9 p214*

**from** scipy.stats **import** chi2

df **=** [19, 5, 10, 18]

x **=** [30.14, 5, 3.24, 3.49]

c **=** [15.99, 17.53]

p\_value **=** 1 **-** chi2**.**cdf(x[0], df[0])

print(f'P(X^2 > {x[0]}) = {round((p\_value), 2)}')

p\_value **=** 1 **-** chi2**.**cdf(x[1], df[1])

print(f'P(X^2 > {x[1]}) = {round((p\_value), 3)}')

p **=** chi2**.**cdf(c[0], df[2]) **-** chi2**.**cdf(x[2], df[2])

print(f'P({x[2]} < X^2 < {c[0]}) : {round((p), 3)}')

p **=** chi2**.**cdf(c[1], df[3]) **-** chi2**.**cdf(x[3], df[3])

print(f'P({x[3]} < X^2 < {c[1]}) : {round((p), 3)}')

P(X^2 > 30.14) = 0.05

P(X^2 > 5) = 0.416

P(3.24 < X^2 < 15.99) : 0.875

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P(3.49 < X^2 < 17.53) : 0.513