In [2]:

*#* 연습문제 *10 p214*

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

df **=** [4, 19, 25]

p **=** [0.99, 0.025, 0.045]

c **=** [37.652]

x **=** chi2**.**ppf(1 **-** p[0], df[0]) print(f"P(X^2 > Xa^2) : {round((x), 3)}")

x **=** chi2**.**ppf(1 **-** p[1], df[1]) print(f"P(X^2 > Xa^2) : {round((x), 3)}")

*# 3*번 연산

*# x = 1 - abs(chi2.cdf(p[2], df[2]) - chi2.cdf(c[0], df[2]))*

*# print(f"\nP({c[0]}(X0.05^2) < X^2 < Xa^2) : {round((x), 4)}")*

Xa2 **=** chi2**.**ppf(1 **-** p[2], df[2])

P **=** chi2**.**cdf(Xa2, df[2]) **-** chi2**.**cdf(c[0], df[2])

print(f'P({c} < X^2 < {Xa2:.3f}) = {P:.3f}')

P(X^2 > Xa^2) : 0.297 P(X^2 > Xa^2) : 32.852

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P([37.652] < X^2 < 38.123) = 0.005