In [8]:

```
# 연습문제 11 p215
from scipy.stats import chi2

n = [31]
sigma2 = [5]
alpha = [0.10, 0.95]

dof = n[0] - 1
upper_bound = chi2.ppf(1 - alpha[0], dof)

C = upper_bound * sigma2[0] / dof
print(f"P(S^2 <= C)=0.90 , C : {round((C), 2)}")

upper_bound2 = chi2.ppf(1 - alpha[1], dof)

C = upper_bound2 * sigma2[0] / dof
print(f"P(S^2 <= C)=0.95 , C : {round((C), 2)}")
```

```
P(S^2 <= C)=0.90 , C : 6.71
```