

Mean = 48, Variance: 290.69(除以n-1)

$$X = N(48, 290.69)$$

$$Y = \frac{X-48}{17} = N(0, 1)$$

根據 Chebyshev' s Inequality

$$\begin{aligned} P(22.5 < X < 73.5) &= P(-1.5 < Y < 1.5) \\ &> 1 - (1/1.5)^2 = 5/9 \end{aligned}$$

$$\text{Lower bound} = 5/9$$