

「統計學(上)」增補資料

【2-47】

(2)……

$$\begin{aligned} P(B_1|R_2) &= \frac{P(B_1 \cap R_2)}{P(R_2)} = \frac{P(B_1) \cdot P(R_2|B_1)}{P(R_2)} = \frac{\frac{b}{b+r} \times \frac{r}{b+r+k}}{\frac{r}{b+r}} \\ &= \frac{b}{b+r+k} \end{aligned}$$

【5-53】

6.

(2)……

$$\begin{aligned} P(\mu - 0.5\sigma < X < \mu + 2\sigma) &= P(3 - 0.5\sqrt{3} < X < 3 + 2\sqrt{3}) \\ &= P(2.134 < X < 6.464) \\ &= P(3 \leq X \leq 6) = \sum_{x=3}^6 \frac{e^{-3} \cdot 3^x}{x!} = 0.5433 \end{aligned}$$