

### Ejercicio 3.1

$$\begin{aligned} P(40 \leq X \leq 50) &= P(X \leq 50) - P(X \leq 40) \\ &= \sum_{i=0}^{50} C_i^{100} (0,5)^i (1-0,5)^{100-i} - \sum_{i=0}^{40} C_i^{100} (0,5)^i (1-0,5)^{100-i} \\ &= \sum_{i=40}^{50} C_i^{100} (0,5)^i (0,5)^{100-i} \end{aligned}$$