

### Ejercicio 3.2

Se aproxima mediante la Distribución Normal

$$N(n, p, \sqrt{n \cdot p \cdot (1-p)})$$

$$N(100, 0.5, \sqrt{100(0.5)(1-0.5)}) = N(50, 5) \Rightarrow \begin{cases} \mu = 50 \\ \sigma = 5 \end{cases}$$

$$P(40 \leq X \leq 50) = P\left(\frac{40-50}{5} \leq \overset{Z}{\frac{X-50}{5}} \leq \frac{50-50}{5}\right)$$
$$= P(-2 \leq Z \leq 0) = P(Z \leq 0) - P(Z \leq -2)$$