

$$= \binom{2}{1} 0.2^1 \cdot 0.8^{2-1} = \underline{\underline{0.5}}$$

① Espacio Muestra $6 \cdot 6 = 36$

sumas posibles $\{(1,6), (2,5), (3,4), (4,3), (5,2), (6,1), \dots\}$

$$P(2/36) = \underline{\underline{0.5331}}$$

2) Sea X el número de artículos defectuosos en un lote de 20 artículos

$$N = 20 \quad n = 4 \quad 0.2 < 0.10 \quad \text{Población infinita}$$

$$P = \frac{x}{N} = \frac{5}{20} = 0.25$$

$$Q = 1 - P = 1 - 0.25 = 0.75$$

$$P(x) = \frac{\binom{5}{1} \binom{15}{3}}{\binom{20}{4}} = 0.4695$$

$$P(x) = \frac{\binom{5}{0} \binom{15}{4}}{\binom{20}{4}} = 0.2817$$

$$\begin{aligned} P(x \geq 1) &= 1 - P(x \leq 0) \\ &= 1 - P(0) = 1 - 0.2817 \\ &= \underline{0.7185} \end{aligned}$$

32 Sea x la variable # de artículos de
en muestra 20 artículos

Población $\left\{ \begin{array}{l} \text{Defectuosa} \\ \text{No Defectuosa} \end{array} \right.$

$$P = (x \leq 1)$$

$$P = \frac{5}{20} = 0.25$$

$$Q = \text{No Defectuosa} \quad 1 - 0.25 = 0.75$$

$$N = 20 \quad \frac{n}{N} = \frac{4}{20} = 0.2 < 0.10 \quad \text{Infinita}$$

$$n = 4 \quad x \sim B(nP, nPQ)$$

$$P(x) = \binom{4}{0} 0.25^0 \cdot 0.75^4$$

$$P(x \geq 1) = 1 - P(x \leq 0)$$

$$= 1 - P(0)$$

$$= 0.3164$$

Seja X número de 5 perguntas em uma amostra
de 2 respostas

$$N = 5$$

$$n = 2$$

$$r = 1$$

$$p = \frac{1}{5} = 0.2 \text{ certo}$$

$$q = 1 - 0.2 = 0.8$$

$$= \binom{2}{1} 0.2^1 \cdot 0.8^{2-1} = 0.5$$

Sea X la V.a. que indica el # de 20 cc por hora

$$\mu = 20 \quad X \sim P(\mu = 20)$$

$$F(x) = \frac{20^x e^{-20}}{x!}$$

$$P(X > 25) = 1 - F(25)$$

$$= 1 - 0.8878$$

Se amplia $P(X > 25)$

$$= 1 - 0.8878$$

no se amplia $P(X \leq 25)$

$$=$$

R// Probabilidad = 0.1122