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Moueda 4^o

$$CCCX \rightarrow p_1^3(1-p_1)$$

$$CCXC \rightarrow p_1^2(1-p_1)p_1$$

$$CXCC \rightarrow p_1(1-p_1)p_1^2$$

$$XCCC \rightarrow \frac{(1-p_1)p_1^3}{4}$$

$$P(3 \text{ cam/mon } 4^{\circ}) = 4p_1^3(1-p_1)$$

Analogamente,

$$P(3 \text{ cam/mon } 2^{\circ}) = 4p_2^3(1-p_2)$$

$$P(1^{\circ}m/3c) = \frac{P(3c|1^{\circ}m) \cdot P(1^{\circ}m)}{P(3c|1^{\circ}m) \cdot P(1^{\circ}m) + P(3c|2^{\circ}m) \cdot P(2^{\circ}m)}$$

$$= \frac{\cancel{\lambda} p_1^3 (1-p_1) \cdot \frac{1}{2}}{\cancel{\lambda} p_1^3 (1-p_1) \cdot \frac{1}{2} + \cancel{\lambda} p_2^3 (1-p_2) \cdot \frac{1}{2}} = \frac{p_1^3 (1-p_1)}{p_1^3 (1-p_1) + p_2^3 (1-p_2)}$$

⑩ Sea $M =$ "la suma de las puntuaciones es 6"

$$P(M) = P(M|CC) \cdot P(CC) + P(M|CF) \cdot P(CF) +$$

$$+ P(M|FC) \cdot P(FC) + P(M|FF) \cdot P(FF) =$$

$$= \frac{5}{36} \cdot \frac{1}{4} + \frac{1}{6} \cdot \frac{1}{4} + \frac{1}{6} \cdot \frac{1}{4} + 0 \cdot \frac{1}{4} = \frac{17}{144} = 0,118$$