

Yo a calcular los marginales de X e Y para comprobar:

Marginales de X:

$$P_x(x) = \begin{cases} 7/40 & \text{si } x=1 \\ 9/40 & \text{si } x=2 \\ 11/40 & \text{si } x=3 \\ 13/40 & \text{si } x=4 \end{cases}$$

$$P(x=1) = \frac{1}{40} + \frac{3}{80} + \frac{1}{20} + \frac{1}{16} = \frac{7}{40} //$$

$$P(x=2) = \frac{3}{80} + \frac{1}{20} + \frac{1}{16} + \frac{3}{40} = \frac{9}{40} //$$

$$P(x=3) = \frac{1}{20} + \frac{1}{16} + \frac{3}{40} + \frac{7}{80} = \frac{11}{40} //$$

$$P(x=4) = \frac{1}{16} + \frac{3}{40} + \frac{7}{80} + \frac{1}{10} = \frac{13}{40} //$$

$$P_y(y) = \begin{cases} 7/40 & \text{si } y=1 \\ 9/40 & \text{si } y=2 \\ 11/40 & \text{si } y=3 \\ 13/40 & \text{si } y=4 \end{cases}$$

$$P(y=1) = \frac{1}{40} + \frac{3}{80} + \frac{1}{20} + \frac{1}{16} = \frac{7}{40} //$$

$$P(y=2) = \frac{3}{80} + \frac{1}{20} + \frac{1}{16} + \frac{3}{40} = \frac{9}{40} //$$

$$P(y=3) = \frac{1}{20} + \frac{1}{16} + \frac{3}{40} + \frac{7}{80} = \frac{11}{40} //$$

$$P(y=4) = \frac{1}{16} + \frac{3}{40} + \frac{7}{80} + \frac{1}{10} = \frac{13}{40} //$$

$$P_{x,y}(2,3) = \frac{1}{16} \neq P_y(3) \cdot P_x(2) = \frac{11}{40} \cdot \frac{9}{40} = \frac{99}{1600}$$

↳ X e Y no son independientes.