

N7

$$A - \text{menge} \quad B - > 5$$

$$P(A) = \frac{1}{2}$$

$$P(B) = \frac{1}{3}$$

$$P(A \cap B) = \frac{1}{2} \cdot \frac{1}{3} = \frac{1}{6}$$

$$a) P(A) - P(A \cap B) = \frac{1}{2} - \frac{1}{6} = \frac{1}{3} = 0,334$$

$$b) P(B) - P(A \cap B) = \frac{1}{3} - \frac{1}{6} = \frac{1}{6} = 0,167$$

$$c) P(A) + P(B) - P(A \cap B) \cdot 2 = \frac{1}{2} + \frac{1}{3} - 2 \cdot \frac{1}{6} = \frac{1}{2} = 0,5$$

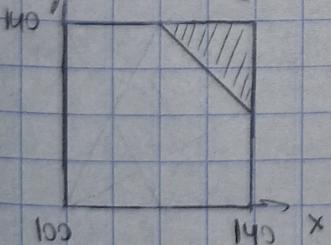
$$d) P(A) + P(B) - P(A \cap B) = \frac{1}{2} + \frac{1}{3} - \frac{1}{6} = \frac{2}{3} = 0,667$$

$$e) P(\bar{A} \cap \bar{B}) = 1 - P(A \cup B) = 1 - (P(A) + P(B) - P(A \cap B)) \\ = 1 - \left(\frac{1}{2} + \frac{1}{3} - \frac{1}{6} \right) = \frac{1}{3} = 0,334$$

$$f) P(\bar{A} \cap \bar{B}) + (P(A) + P(B) - 2 \cdot P(A \cap B)) = 1 - (P(A) + P(B) - P(A \cap B)) + (P(A) + P(B) - 2 \cdot P(A \cap B)) = 1 - \left(\frac{1}{2} + \frac{1}{3} - \frac{1}{6} \right) + \left(\frac{1}{2} + \frac{1}{3} - 2 \cdot \frac{1}{6} \right) = \frac{5}{6} = 0,834$$

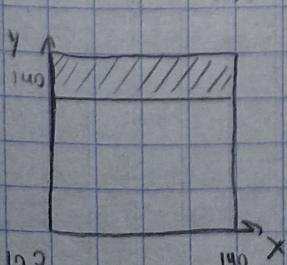
N8

$$100 \leq x, y \leq 140$$



$$a) x+y > 260$$

$$P(A) = \frac{20 \cdot 20 \cdot \frac{1}{2}}{1600} = 0,125$$



$$b) y > 130$$

$$P(B) = \frac{40 \cdot 10}{1600} = 0,25$$