

Stad 1

2a)

$$P(A) = 0,31$$

$$P(B) = 0,46$$

$$P(A \cap B) = 0,13$$

$$P(A \cup B) = ?$$

$$P(A \cup B) = P(A) + P(B) - P(A \cap B) = 0,64$$

$$P(\overline{A \cup B}) = 1 - P(A \cup B) = 0,36$$

$$P(A \cup B) = P(\overline{A \cup B}) + P(A \cap B) = 0,54$$

$$P(A \cup \overline{B}) = P(A) + P(\overline{A \cap B}) = 0,61$$

2b)

$$P(A, \text{ men ikke } B) = P(A) - P(A \cap B) =$$

4)

3 telefoner

4 defekte

$$\binom{4}{3} = \frac{4 \cdot 3 \cdot 2}{3 \cdot 2 \cdot 1} = 4$$

$$\binom{4}{2} \cdot \binom{2}{1} = \frac{4 \cdot 3}{2} \cdot 2 = 9$$

$$4 + 2 \cdot 3 = 9$$

5a) 12 Lekturer, trekk 5, uten tilbakelegging

$$n = \binom{12}{5} = \frac{12 \cdot 11 \cdot 10 \cdot 9 \cdot 8}{5 \cdot 4 \cdot 3 \cdot 2} = \frac{11 \cdot 9 \cdot 8}{10 \cdot 12} = ?$$

Dårlig formulert spørsmål

Offgabe 6)

$$a) \binom{52}{3} = \frac{52 \cdot 51 \cdot 50}{3 \cdot 2} = 52 \cdot 17 = 884$$

$$b) 3 \cdot 2 \cdot 1 = 6$$

c) A: 3 an samme bord

$$m = \binom{52}{3}$$

$$g = \binom{4}{1} \cdot \binom{11}{2}$$

$$P(A) = \frac{g}{m} = \frac{\binom{4}{1} \cdot \binom{11}{2}}{\binom{52}{3}} = \frac{4 \cdot 3 \cdot 2 \cdot 1 \cdot \frac{1}{2}}{\frac{52 \cdot 51 \cdot 50}{3 \cdot 2}} = \frac{4 \cdot 3 \cdot 2 \cdot 1 \cdot \frac{1}{2} \cdot 3 \cdot 2}{52 \cdot 51 \cdot 50}$$
$$= \frac{3 \cdot \frac{1}{4}}{52 \cdot 51 \cdot 50}$$

