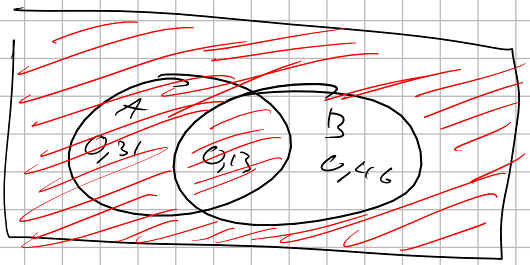
Stade 1

2 a)



$P(A) = 0,31$

$P(B) = 0,46$

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

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

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

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

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

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

2 b)

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

4)

33 telefoner

4 defekte

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

$\binom{4}{2} \cdot \binom{29}{1} = \frac{4 \cdot 3}{2} \cdot 29$

$4 + 2 \cdot 3 \cdot 29$

5 a) 12 lakritser, trekk 5, uten tilbakelegging

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

Dårlig formulert oppgave?

Oppgave 6)

a) $\binom{52}{3} = \frac{52 \cdot 51 \cdot 50}{3 \cdot 2} = 52 \cdot 17 \cdot 25$

b) $3 \cdot 2 \cdot 1 \cdot 22100$

c)

A: 3 av samme sort

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

$g = \binom{4}{1} \cdot \left(\frac{1}{4}\right)^3$

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

$= \frac{3^2 \cdot \frac{1}{4}}{52 \cdot 51 \cdot 50}$