

Rijexamen

5. $P(x \geq 4) = 1 - P(x \leq 3) = 1 - \text{binomcdf}(9, \frac{1}{2}, 3) = 0,75$

6. $P(4 \text{ ja / nee goed}) = (\frac{1}{2})^4 = \frac{1}{16}$

$$P(3 \text{ ja / nee goed}) = \binom{4}{3} (\frac{1}{2})^4 = \frac{1}{4}$$

$$P(2 \text{ ja / nee} + 1 \text{ driekeuze goed}) = \binom{4}{2} (\frac{1}{2})^4 \cdot \frac{1}{3} = \frac{1}{8}$$

De slaagkans is dus: $\frac{1}{16} + \frac{1}{4} + \frac{1}{8} = \frac{7}{16}$

7. $P(4 \text{ x zakken}) = (P(\text{zakken}))^4 = 0,11$

Dus $P(\text{zakken}) = 0,11^{1/4} = 0,576$

De slaagkans is dan $1 - 0,576 \approx 0,42$