

Koffers

$$\begin{aligned}
 16. \quad P(60 < K < 80) &= P(K \leq 79) - P(K \leq 60) \\
 &= \text{binompdf}(450, 0,15, 79) - \text{binompdf}(450, 0,15, 60) \\
 &= 0,7628
 \end{aligned}$$

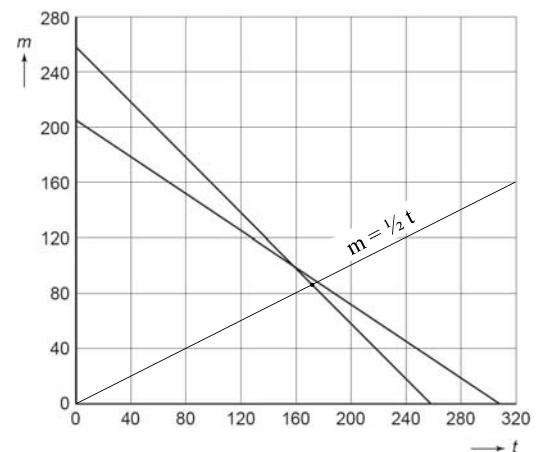
$$17. \quad 68 \cdot (450 \cdot 0,15) \cdot 0,10 = 459 \text{ koffers}$$

$$\begin{aligned}
 18. \quad \text{aantal manuren:} & \quad 2t + 3m \\
 \text{dus} & \quad 2t + 3m \leq 616 \\
 \text{benodigd leer:} & \quad 1,5t + 1,5m \\
 \text{dus} & \quad 1,5t + 1,5m \leq 387 \quad \text{ofwel} \quad t + m = 258
 \end{aligned}$$

$$\begin{aligned}
 19. \quad \text{De winst is maximaal als:} & \quad 2t + 3m = 616 & \quad \text{én} & \quad t + m = 258 \text{ dus } t = 258 - m \\
 & \quad 2(258 - m) + 3m = 616 \\
 & \quad 516 + m = 616 & \quad \rightarrow & \quad m = 100 \\
 & \quad 2t + 3 \cdot 100 = 616 \\
 & \quad 2t = 316 & \quad \rightarrow & \quad t = 158
 \end{aligned}$$

$$\text{De maximale winst is dan:} \quad 44 \cdot 158 + 56 \cdot 100 = 12\,552 \text{ euro}$$

$$\begin{aligned}
 20. \quad t = 2m & \quad \rightarrow & \quad m = \frac{1}{2}t \\
 \text{Deze lijn snijdt de lijn} & \quad m = 258 - t \text{ in het punt:} \\
 \frac{1}{2}t = 258 - t & \quad \rightarrow & \quad t = 172 \\
 \text{en} & & \quad m = \frac{1}{2} \cdot 172 = 86 \\
 \text{Maximale winst:} & \quad 44 \cdot 172 + 56 \cdot 86 = 12\,384 \text{ euro.}
 \end{aligned}$$



Of:

$$\begin{aligned}
 t = 2m & \quad 4m + 3m \leq 616 & \quad \rightarrow & \quad m \leq 88 \\
 & \quad 2m + m \leq 258 & \quad \rightarrow & \quad m \leq 86 & \quad \rightarrow & \quad m \text{ hoogstens } 86 \\
 & \quad 2t \leq 616 - 3 \cdot 86 & \quad \rightarrow & \quad t \leq 179 \\
 & \quad t \leq 258 - 86 & \quad \rightarrow & \quad t \leq 172 & \quad \rightarrow & \quad t \text{ hoogstens } 172
 \end{aligned}$$

$$\text{Maximale winst } 44 \cdot 172 + 56 \cdot 86 = 12\,384 \text{ euro.}$$