

$$\begin{aligned}(1) \text{ a)} \quad a_1 &= 2 \\ a_2 &= 5 \\ a_3 &= 8 \\ a_4 &= 11 \\ a_5 &= 14\end{aligned}$$

$$\begin{aligned}\text{b)} \quad a_1 &= 18 \\ a_2 &= 13 \\ a_3 &= 8 \\ a_4 &= 3 \\ a_5 &= -2\end{aligned}$$

$$\begin{aligned}(2) \text{ a)} \quad a_1 &= 1 \\ a_2 &= \frac{3}{2} \\ a_3 &= 2 \\ a_4 &= \frac{5}{2} \\ a_5 &= 3\end{aligned}$$

$$\begin{aligned}\text{b)} \quad a_1 &= 2.8 \\ a_2 &= 2.5 \\ a_3 &= 2.2 \\ a_4 &= 1.9 \\ a_5 &= 1.6\end{aligned}$$

$$\begin{aligned}(3) \text{ a)} \quad a_1 &= 3 \\ a_2 &= 6 \\ a_3 &= 12 \\ a_4 &= 24 \\ a_5 &= 48\end{aligned}$$

$$\begin{aligned}\text{b)} \quad a_1 &= 2 \\ a_2 &= -6 \\ a_3 &= 18 \\ a_4 &= -54 \\ a_5 &= 162\end{aligned}$$

$$\begin{aligned}(4) \text{ a)} \quad a_1 &= 5 \\ a_2 &= 5\sqrt{2} \\ a_3 &= 10 \\ a_4 &= 10\sqrt{2} \\ a_5 &= 20\end{aligned}$$

$$\begin{aligned}\text{b)} \quad a_1 &= 9 \\ a_2 &= -3\sqrt{3} \\ a_3 &= 3 \\ a_4 &= -\sqrt{3} \\ a_5 &= 1\end{aligned}$$

$$\begin{aligned}(5) \text{ a)} \quad a_1 &= \frac{1}{3} \\ a_2 &= \frac{1}{6} \\ a_3 &= \frac{1}{12} \\ a_4 &= \frac{1}{24} \\ a_5 &= \frac{1}{48}\end{aligned}$$

$$\begin{aligned}\text{b)} \quad a_1 &= 0.3 \\ a_2 &= 0.06 \\ a_3 &= 0.012 \\ a_4 &= 0.0024 \\ a_5 &= 0.00048\end{aligned}$$

$$(6) \quad 3 \cdot 10^{13} \text{ (30 Billionen)}$$