

**Lösung S.56/15a,c:**

a)

$$q = 1 + \frac{p}{100} = 1 + \frac{3}{100} = 1,03$$

$$K_5 = 1000\text{DM} \cdot 1,03 \frac{1,03^5 - 1}{1,03 - 1} \approx 1000\text{DM} \cdot 1,03 \frac{1,159274074 - 1}{0,03} \approx 5468,41\text{DM};$$

c)

$$q = 1,04$$

$$K_{10} = R \cdot 1,04 \frac{1,04^{10} - 1}{1,04 - 1} = 20000\text{DM}$$

$$R \approx \frac{20000\text{DM}}{1,04 \frac{1,480244285 - 1}{1,04 - 1}} \approx \frac{20000\text{DM}}{12,48635141} \approx 1601,75\text{DM}$$