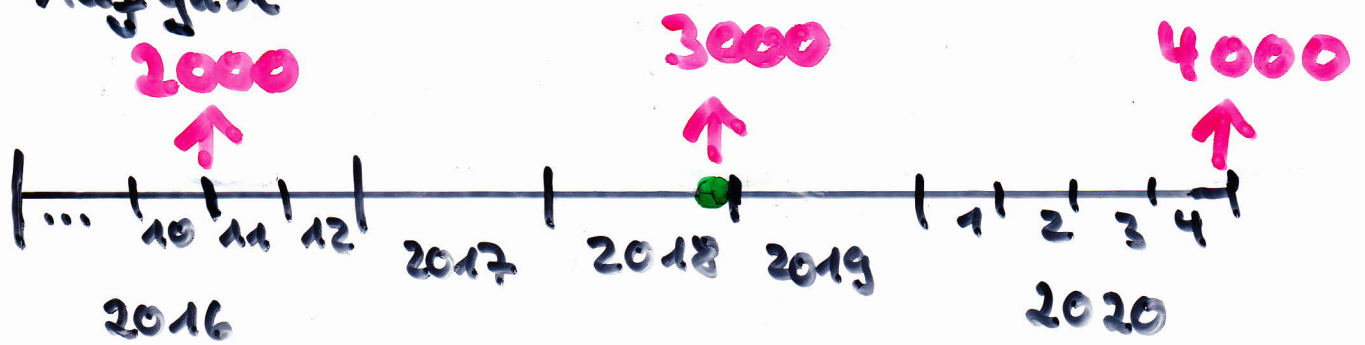
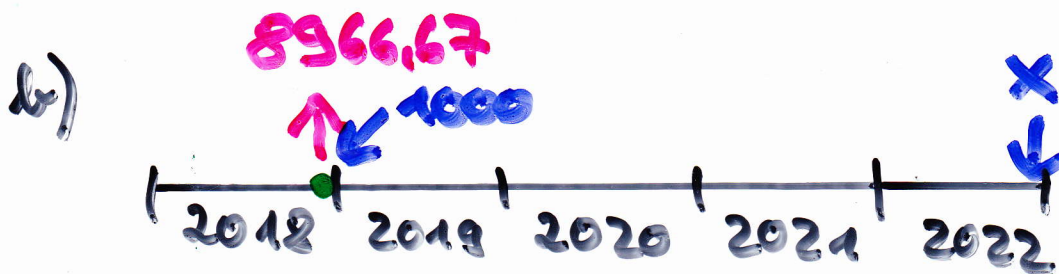


# Aufgabe



$$a) \quad 2000 \left(1 + 2 \frac{2}{12} \cdot 0,05\right) + 3000 + \frac{4000}{1 + 1 \frac{4}{12} \cdot 0,05}$$

$$= 8966,67$$

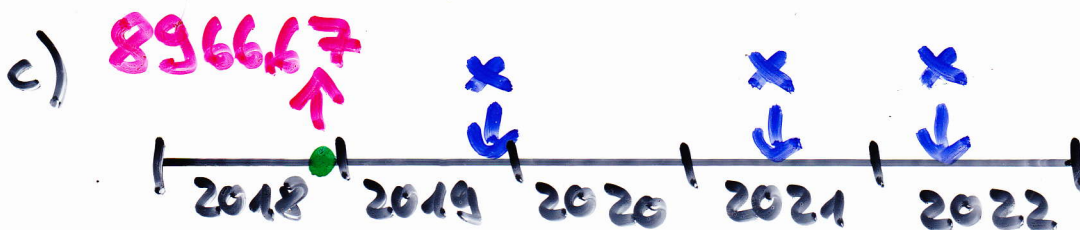


Schulden = Rückz.

$$8966,67 = 1000 + \frac{x}{1 + 4 \cdot 0,05}$$

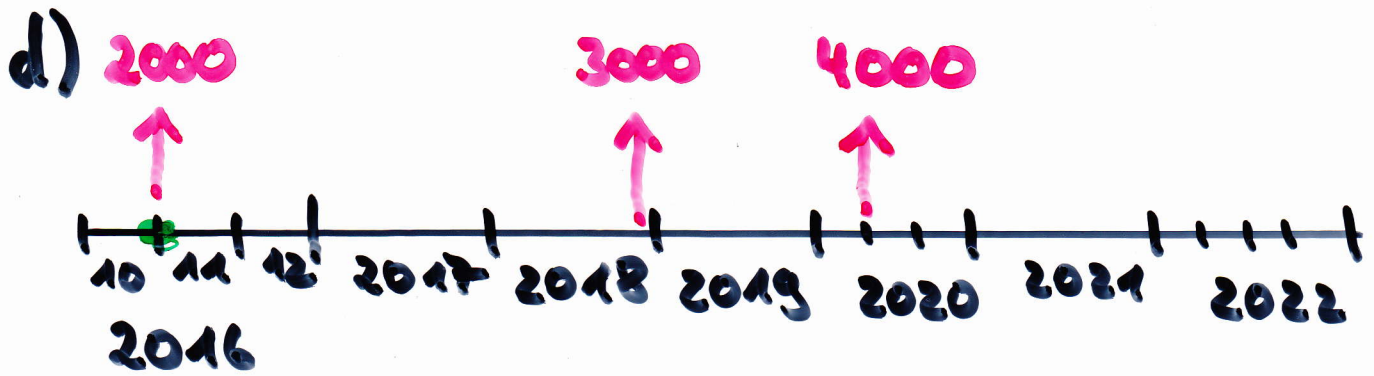
$$8966,67 = 1000 + 0,8333 x$$

$$x = 9560$$



$$8966,67 = \frac{x}{1,05} + \frac{x}{1 + 2,5 \cdot 0,05} + \frac{x}{1 + 3,25 \cdot 0,05}$$

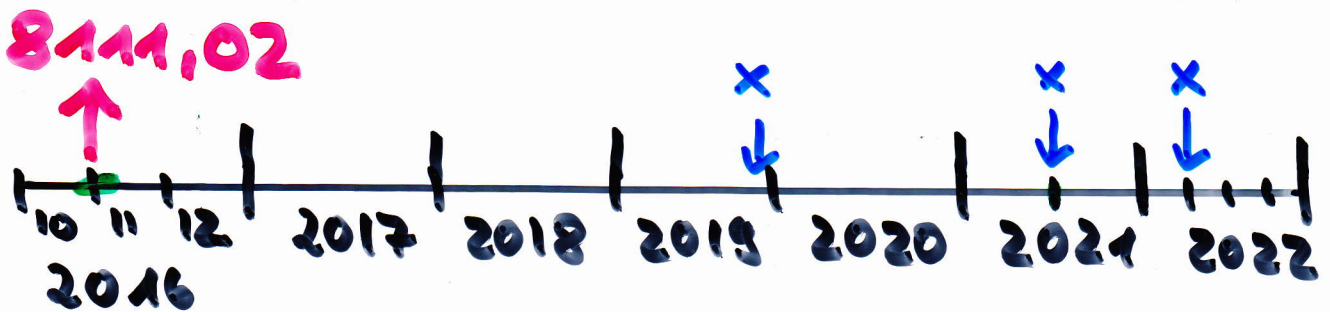
$$x = 3319,15$$



Wert der Schulden am 31.10.2016:

$$2000 + \frac{3000}{1 + 2 \frac{2}{12} \cdot 0,05} + \frac{4000}{1 + 3 \frac{6}{12} \cdot 0,05}$$

$$= 8111,02$$



Schulden = Rückz.

$$8111,02 = \frac{x}{1 + 3 \frac{2}{12} \cdot 0,05} + \frac{x}{1 + 4 \frac{2}{12} \cdot 0,05}$$

$$+ \frac{x}{1 + 5 \frac{5}{12} \cdot 0,05}$$

$$8111,02 = 2,4610 \cdot x$$

$$x = 3295,82$$