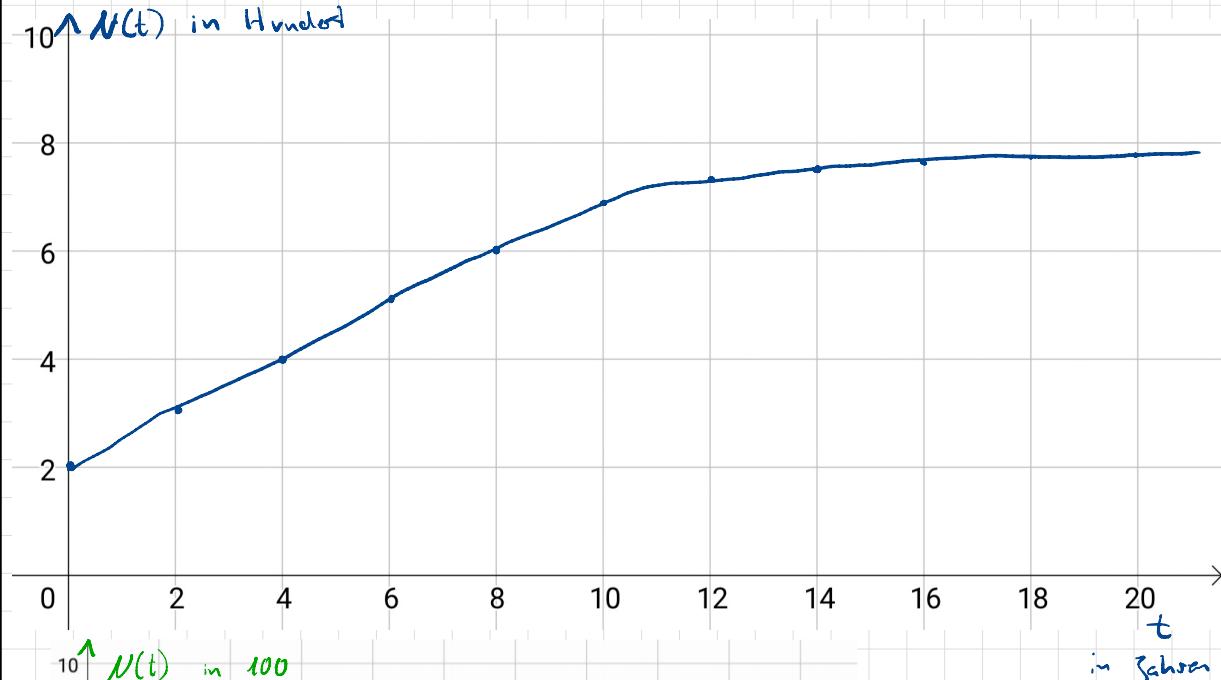


Mittlere Änderungsrate - Übung

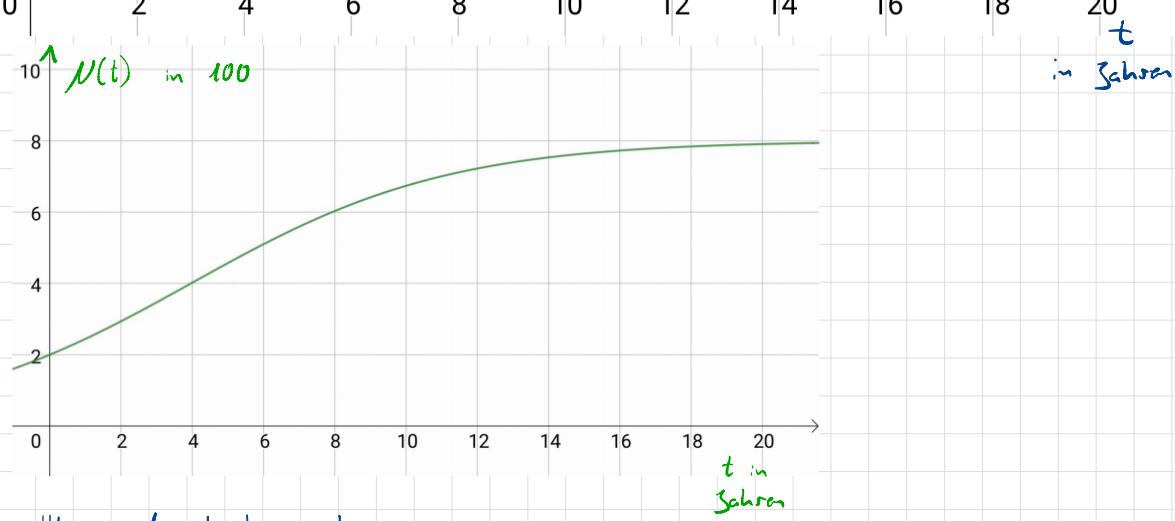
≤ 80 Nr. 4 a)

$$N(t) = \frac{8}{1+3 \cdot 2^{-0,6t}}$$

$\Delta N(t)$ in Hundert



$\Delta N(t)$ in 100



b)

mittlere Wachstumsrate

$$[0; 2] : \frac{N(2) - N(0)}{2 - 0} = \frac{\frac{8}{1+3 \cdot 2^{0,6 \cdot 2}} - \frac{8}{1+3 \cdot 2^{0,6 \cdot 0}}}{2} \approx \frac{2,94 - 2}{2} = 0,47$$

$$[2; 3] : \frac{N(3) - N(2)}{3 - 2} \approx \frac{3,47 - 2,94}{1} = 0,53$$

$$[3; 4] : \frac{N(4) - N(3)}{4 - 3} \approx \frac{4,02 - 3,47}{1} = 0,55$$

$$[9; 10] : \frac{N(10) - N(9)}{10 - 9} \approx \frac{6,74 - 6,41}{1} = 0,33$$