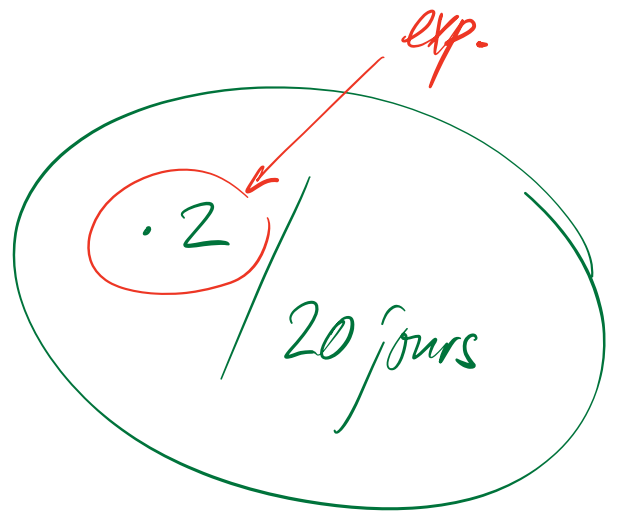


a)

# jours	# abeilles infectées
$n$	$Q(n)$
0	23
$n=20$	46
40	92

$Q_0$   
 $\cdot 2$   
 $Q(20)$   
 $\cdot 2$



b)

$$Q(n) = Q_0 \cdot 2^n$$

$Q_0 = ?$   
 $2 = ?$

$$Q(0) = Q_0 \cdot \underbrace{2^0}_{=1} = Q_0 = 23$$

$$\Rightarrow Q(n) = 23 \cdot 2^n$$

$$Q(20) = 46 = 23 \cdot 2^{20}$$

$$\frac{46}{23} = 2^{20}$$

$$2^{20} = 2 \quad / \quad 2 = \sqrt[20]{2} \approx 1,035265$$

$$Q(n) \cong 23 \cdot 1,035265^n \cong 23 \cdot 2^{\frac{n}{20}}$$