Homework Help

37
45
40

37/ $5000 2.25% 5 yrs compounded quarterly.

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

$$A = 5000\left(1 + \frac{0.0225}{4}\right)^{4 \cdot 5}$$

40/ Move decimal - should be 0.0125.

45/ $y = 2500\,(1.50)^t$ $N = N_0(1 \pm r)^t$

a ↑ Start amt; b ↑ rate of growth

50% increase

$y = 25{,}000\,(0.94)^t$

6% decrease

22 in thousands

$y = 994.29(1.03)^t$

c) When will population be 590,000

January 21, 2022

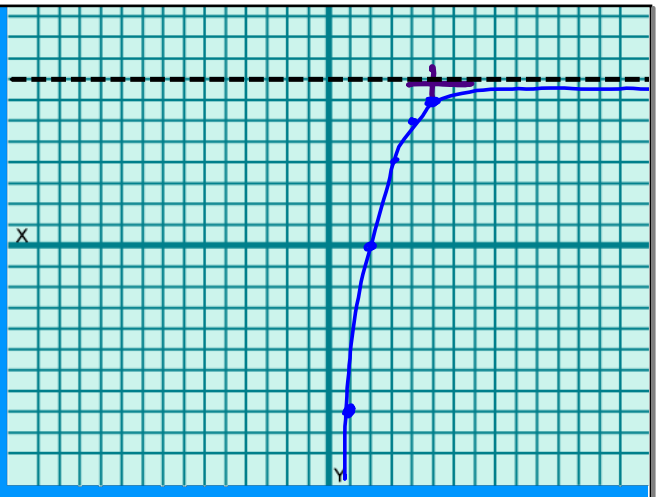
6/ $y = -\left(\frac{1}{2}\right)^{x-5} + 8$

Right 5 UP 8

$y = -(2^{-1})^{x-5}$

$= -(2)^{-(x-5)}$

x	y
0	-1
-1	-2
-2	-4
-3	-8



9/ $y = (3)^{-x+2}$

$= 3^{-(x-2)}$

Right 2 No Up or Down

x	y
0	1
-1	3
-2	9