



Exponential Function Solving - Growth (Discrete) Equation to Value at Time

1 What is the value of the final population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$P = 300 \cdot (1 + 0.04)^{(7)}$$

A $P = 340$

B $P = 295$

C $P = 250$

D $P = 394$

2 What is the value of the final population given this model of a growth of an insect population that breeds once per year?

$$P = 900 \cdot (1 + 0.05)^{(7)}$$

A $P = 990$

B $P = 1,266$

C $P = 1,710$

D $P = 1,030$

3 What is the value of the final population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$P = 600 \cdot (1 + 0.02)^{(4)}$$

A $P = 890$

B $P = 810$

C $P = 649$

D $P = 720$

4 What is the value of the final population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$P = 800 \cdot (1 + 0.09)^{(4)}$$

A $P = 700$

B $P = 1,490$

C $P = 1,129$

D $P = 720$

5 What is the value of the final population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$P = 300 \cdot (1 + 0.06)^{(8)}$$

A $P = 585$

B $P = 478$

C $P = 410$

D $P = 635$

6 What is the value of the final debt given this model of a growth in credit card debt with monthly interest?

$$D = 200 \cdot (1 + 0.04)^{(7)}$$

A $D = 250$

B $D = 340$

C $D = 325$

D $D = 263$

7 What is the value of the final cash given this model of a monthly compounding growth of money in a savings account?

$$P = 200 \cdot (1 + 0.06)^{(3)}$$

A $P = 238$

B $P = 245$

C $P = 175$

D $P = 220$

8 What is the value of the final debt given this model of a growth in credit card debt with quarterly interest?

$$D = 900 \cdot (1 + 0.05)^{(3)}$$

A $D = 920$

B $D = 1,230$

C $D = 650$

D $D = 1,041$