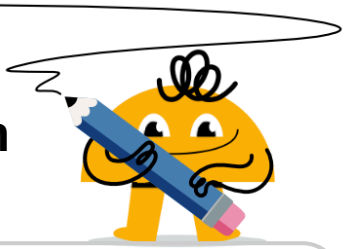
Name

Exponential Function Solving - Growth (Discrete) Equation to Starting Value



1 Solve for the starting population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$993 = P_0 \cdot (1 + 0.02)^{(5)}$$

A	$P_0 = \frac{P}{(1+r)^t}$	B	$0 + P_0 = P \cdot (1 + r)^t$
C	$7 + P_0 = P \cdot (1 + r)^t$	D	$9 + P_0 = \frac{P}{(1-r)^t}$

2 Solve for the starting debt given this model of a growth in credit card debt with quarterly interest?

$$684 = D_0 \cdot (1 + 0.04)^{(8)}$$

A	$8 + D_0 = \frac{D}{(1-r)^t}$	B	$1 + D_0 = \frac{D}{(1-r)^t}$
C	$4 + D_0 = \frac{D}{(1-r)^t}$	D	$D_0 = \frac{D}{(1+r)^t}$

3 Solve for the starting population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$684 = P_0 \cdot (1 + 0.04)^{(8)}$$

A	$7 + P_0 = \frac{P}{(1-r)^t}$	B	$P_0 = \frac{P}{(1+r)^t}$
C	$6 + P_0 = \frac{P}{(1-r)^t}$	D	$9 + P_0 = \frac{P}{(1-r)^t}$

4 Solve for the starting population given this model of a growth of an insect population that breeds once per year?

$$1,122 = P_0 \cdot (1 + 0.07)^{(5)}$$

A	$6 + P_0 = P \cdot (1 + r)^t$	B	$5 + P_0 = P \cdot (1 + r)^t$
C	$P_0 = \frac{P}{(1+r)^t}$		

5 Solve for the starting cash given this model of a monthly compounding growth of money in a savings account?

$$1,033 = P_0 \cdot (1 + 0.02)^{(7)}$$

A	$7 + P_0 = \frac{P}{(1-r)^t}$	B	$5 + P_0 = P \cdot (1 + r)^t$
C	$3 + P_0 = P \cdot (1 + r)^t$	D	$P_0 = \frac{P}{(1+r)^t}$

6 Solve for the starting population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$562 = P_0 \cdot (1 + 0.04)^{(3)}$$

A	$1 + P_0 = \frac{P}{(1-r)^t}$	B	$P_0 = \frac{P}{(1+r)^t}$
C	$2 + P_0 = P \cdot (1 + r)^t$	D	$8 + P_0 = P \cdot (1 + r)^t$

7 Solve for the starting population given this model of a growth of a rabbit population (yearly breeding cycle)?

$$1,204 = P_0 \cdot (1 + 0.06)^{(5)}$$

A	$0 + P_0 = \frac{P}{(1-r)^t}$	B	$1 + P_0 = P \cdot (1 + r)^t$
C	$P_0 = \frac{P}{(1+r)^t}$		

8 Solve for the starting population given this model of a growth of an insect population that breeds once per year?

$$936 = P_0 \cdot (1 + 0.06)^{(5)}$$

A	$2 + P_0 = P \cdot (1 + r)^t$	B	$P_0 = \frac{P}{(1+r)^t}$
C	$7 + P_0 = \frac{P}{(1-r)^t}$	D	$8 + P_0 = P \cdot (1 + r)^t$