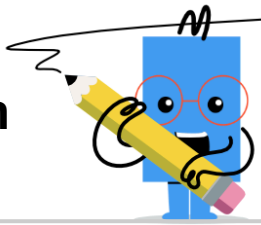
Name

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



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

$$972 = P_0 \cdot (1 + 0.05)^{(4)}$$

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

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

$$1,133 = D_0 \cdot (1 + 0.08)^{(3)}$$

A $D_0 = D \cdot (1+r)^t$

B $D_0 = \frac{D}{(1+r)^t}$

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

$$614 = P_0 \cdot (1 + 0.03)^{(7)}$$

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

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

$$401 = D_0 \cdot (1 + 0.06)^{(5)}$$

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

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

$$284 = P_0 \cdot (1 + 0.04)^{(9)}$$

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

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

$$367 = D_0 \cdot (1 + 0.07)^{(9)}$$

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

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

$$899 = D_0 \cdot (1 + 0.04)^{(3)}$$

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

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

$$251 = P_0 \cdot (1 + 0.08)^{(3)}$$

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