Name

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

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

$$D = 300 \cdot (1 + 0.09)^{(4)}$$

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

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

$$P = 200 \cdot (1 + 0.08)^{(6)}$$

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

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

$$P = 300 \cdot (1 + 0.07)^{(2)}$$

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

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

$$P = 200 \cdot (1 + 0.09)^{(5)}$$

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

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

$$P = 400 \cdot (1 + 0.03)^{(2)}$$

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

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

$$P = 300 \cdot (1 + 0.02)^{(8)}$$

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

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

$$D = 400 \cdot (1 + 0.09)^{(5)}$$

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

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

$$P = 400 \cdot (1 + 0.06)^{(7)}$$

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