Name

Exponential Function Solution Equation - Growth (Discrete) Equation to Rate

1 Rearrange this equation to solve for the rate given this model of a growth in credit card debt with monthly interest?

$$983 = 800 \cdot (1 + r)^{(7)}$$

A $r = (\frac{983}{800})^{\frac{7}{2}} - 1$

B $r = (\frac{983}{800})^{\frac{1}{7}} - 1$

C $r = -(\frac{983}{800})^{\frac{1}{7}} + 1$

2 Rearrange this equation to solve for the rate given this model of a growth of a rabbit population (yearly breeding cycle)?

$$245 = 200 \cdot (1 + r)^{(7)}$$

A $r = -(\frac{245}{200})^{\frac{1}{7}} + 1$

B $r = (\frac{245}{200})^{\frac{7}{2}} - 1$

C $r = (\frac{245}{200})^{\frac{1}{7}} - 1$

3 Rearrange this equation to solve for the rate given this model of a growth in credit card debt with monthly interest?

$$343 = 200 \cdot (1 + r)^{(8)}$$

A $r = (\frac{343}{200})^{\frac{1}{8}} - 1$

B $r = -(\frac{343}{200})^{\frac{1}{8}} + 1$

4 Rearrange this equation to solve for the rate given this model of a growth of an insect population that breeds once per year?

$$597 = 500 \cdot (1 + r)^{(9)}$$

A $r = -(\frac{597}{500})^{\frac{1}{9}} + 1$

B $r = (\frac{597}{500})^{\frac{9}{2}} - 1$

C $r = (\frac{597}{500})^{\frac{1}{9}} - 1$

5 Rearrange this equation to solve for the rate given this model of a monthly compounding growth of money in a savings account?

$$955 = 800 \cdot (1 + r)^{(6)}$$

A $r = (\frac{955}{800})^{\frac{1}{6}} - 1$

B $r = (\frac{955}{800})^{\frac{6}{2}} - 1$

6 Rearrange this equation to solve for the rate given this model of a growth of a rabbit population (yearly breeding cycle)?

$$562 = 400 \cdot (1 + r)^{(7)}$$

A $r = (\frac{562}{400})^{\frac{1}{7}} - 1$

B $r = -(\frac{562}{400})^{\frac{1}{7}} + 1$

7 Rearrange this equation to solve for the rate given this model of a growth of a rabbit population (yearly breeding cycle)?

$$735 = 400 \cdot (1 + r)^{(9)}$$

A $r = (\frac{735}{400})^{\frac{9}{2}} - 1$

B $r = (\frac{735}{400})^{\frac{1}{9}} - 1$

C $r = -(\frac{735}{400})^{\frac{1}{9}} + 1$

8 Rearrange this equation to solve for the rate given this model of a monthly compounding growth of money in a savings account?

$$422 = 300 \cdot (1 + r)^{(7)}$$

A $r = (\frac{422}{300})^{\frac{7}{2}} - 1$

B $r = (\frac{422}{300})^{\frac{1}{7}} - 1$

C $r = -(\frac{422}{300})^{\frac{1}{7}} + 1$