



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

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

$$816 = 700 \cdot (1 + r)^{(2)}$$

A $r = \left(\frac{816}{700}\right)^{\frac{1}{2}} - 1$

B $r = \left(\frac{816}{700}\right)^{\frac{1}{2}} - 1$

C $r = -\left(\frac{816}{700}\right)^{\frac{1}{2}} + 1$

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

$$936 = 700 \cdot (1 + r)^{(5)}$$

A $r = \left(\frac{936}{700}\right)^{\frac{1}{5}} - 1$

B $r = \left(\frac{936}{700}\right)^{\frac{5}{2}} - 1$

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

$$859 = 500 \cdot (1 + r)^{(8)}$$

A $r = -\left(\frac{859}{500}\right)^{\frac{1}{8}} + 1$

B $r = \left(\frac{859}{500}\right)^{\frac{1}{8}} - 1$

C $r = \left(\frac{859}{500}\right)^{\frac{1}{8}} - 1$

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

$$423 = 300 \cdot (1 + r)^{(4)}$$

A $r = -\left(\frac{423}{300}\right)^{\frac{1}{4}} + 1$

B $r = \left(\frac{423}{300}\right)^{\frac{1}{4}} - 1$

C $r = \left(\frac{423}{300}\right)^{\frac{1}{4}} - 1$

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

$$1,195 = 600 \cdot (1 + r)^{(8)}$$

A $r = \left(\frac{1195}{600}\right)^{\frac{1}{8}} - 1$

B $r = -\left(\frac{1195}{600}\right)^{\frac{1}{8}} + 1$

C $r = \left(\frac{1195}{600}\right)^{\frac{1}{8}} - 1$

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

$$1,041 = 900 \cdot (1 + r)^{(3)}$$

A $r = \left(\frac{1041}{900}\right)^{\frac{1}{3}} - 1$

B $r = -\left(\frac{1041}{900}\right)^{\frac{1}{3}} + 1$

C $r = \left(\frac{1041}{900}\right)^{\frac{1}{3}} - 1$

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

$$647 = 500 \cdot (1 + r)^{(3)}$$

A $r = \left(\frac{647}{500}\right)^{\frac{1}{3}} - 1$

B $r = -\left(\frac{647}{500}\right)^{\frac{1}{3}} + 1$

C $r = \left(\frac{647}{500}\right)^{\frac{1}{3}} - 1$

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

$$938 = 700 \cdot (1 + r)^{(6)}$$

A $r = \left(\frac{938}{700}\right)^{\frac{1}{6}} - 1$

B $r = -\left(\frac{938}{700}\right)^{\frac{1}{6}} + 1$

C $r = \left(\frac{938}{700}\right)^{\frac{1}{6}} - 1$