Name

Exponential Function Solution Equation - Growth (Continuous) Equation to Starting Value

1 Rearrange this equation to solve for the starting population given this model of a continuous growth of a rabbit population?

$$762 = P_0 \cdot e^{(0.08 \cdot 3)}$$

A $P_0 = \frac{e^{(0.08 \cdot 3)}}{762}$

B $P_0 = \frac{762}{e^{(0.08 \cdot 3)}}$

2 Rearrange this equation to solve for the starting price given this model of a continuously compounding growth of a share price?

$$944 = S_0 \cdot e^{(0.06 \cdot 5)}$$

A $S_0 = \frac{944}{e^{(\frac{0.06}{5})}}$

B $S_0 = \frac{944}{e^{(0.06 \cdot 5)}}$

C $S_0 = \frac{e^{(0.06 \cdot 5)}}{944}$

3 Rearrange this equation to solve for the starting downloads given this model of a continuously compounding growth of app downloads?

$$974 = A_0 \cdot e^{(0.02 \cdot 4)}$$

A $A_0 = \frac{974}{e^{(\frac{0.02}{4})}}$

B $A_0 = \frac{974}{e^{(0.02 \cdot 4)}}$

C $A_0 = \frac{e^{(0.02 \cdot 4)}}{974}$

4 Rearrange this equation to solve for the starting debt given this model of a growth of debt on a credit card with continuous compounding?

$$381 = D_0 \cdot e^{(0.06 \cdot 4)}$$

A $D_0 = \frac{e^{(0.06 \cdot 4)}}{381}$

B $D_0 = \frac{381}{e^{(\frac{0.06}{4})}}$

C $D_0 = \frac{381}{e^{(0.06 \cdot 4)}}$

5 Rearrange this equation to solve for the starting price given this model of a continuously compounding growth of a share price?

$$661 = S_0 \cdot e^{(0.04 \cdot 7)}$$

A $S_0 = \frac{e^{(0.04 \cdot 7)}}{661}$

B $S_0 = \frac{661}{e^{(0.04 \cdot 7)}}$

C $S_0 = \frac{661}{e^{(\frac{0.04}{7})}}$

6 Rearrange this equation to solve for the starting population given this model of a continuous growth of an insect population?

$$304 = P_0 \cdot e^{(0.06 \cdot 7)}$$

A $P_0 = \frac{304}{e^{(0.06 \cdot 7)}}$

B $P_0 = \frac{304}{e^{(\frac{0.06}{7})}}$

C $P_0 = \frac{e^{(0.06 \cdot 7)}}{304}$

7 Rearrange this equation to solve for the starting population given this model of a continuous growth of a bacteria population?

$$225 = P_0 \cdot e^{(0.03 \cdot 4)}$$

A $P_0 = \frac{225}{e^{(0.03 \cdot 4)}}$

B $P_0 = \frac{225}{e^{(\frac{0.03}{4})}}$

C $P_0 = \frac{e^{(0.03 \cdot 4)}}{225}$

8 Rearrange this equation to solve for the starting price given this model of a continuously compounding growth of a share price?

$$627 = S_0 \cdot e^{(0.09 \cdot 5)}$$

A $S_0 = \frac{627}{e^{(\frac{0.09}{5})}}$

B $S_0 = \frac{627}{e^{(0.09 \cdot 5)}}$

C $S_0 = \frac{e^{(0.09 \cdot 5)}}{627}$