



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

1 Solve for the final views given this model of a continuous exponential growth of social media post views?

$$V = 600 \cdot e^{(0.03 \cdot 9)}$$

A $V = V_0 \cdot e^{(\frac{r}{t})}$

B $V = V_0 - e^{(r \cdot t)}$

C $V = V_0 \cdot e^{(r \cdot t)}$

2 Solve for the final population given this model of a continuous growth of a bacteria population?

$$P = 200 \cdot e^{(0.06 \cdot 4)}$$

A $P = P_0 \cdot e^{(r \cdot t)}$

B $P = P_0 - e^{(r \cdot t)}$

C $P = P_0 \cdot e^{(\frac{r}{t})}$

3 Solve for the final population given this model of a continuous growth of an insect population?

$$P = 500 \cdot e^{(0.09 \cdot 7)}$$

A $P = P_0 - e^{(r \cdot t)}$

B $P = P_0 \cdot e^{(\frac{r}{t})}$

C $P = P_0 \cdot e^{(r \cdot t)}$

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

$$P = 200 \cdot e^{(0.07 \cdot 4)}$$

A $P = P_0 \cdot e^{(\frac{r}{t})}$

B $P = P_0 - e^{(r \cdot t)}$

C $P = P_0 \cdot e^{(r \cdot t)}$

5 Solve for the final downloads given this model of a continuously compounding growth of app downloads?

$$A = 900 \cdot e^{(0.06 \cdot 4)}$$

A $A = A_0 \cdot e^{(\frac{r}{t})}$

B $A = A_0 \cdot e^{(r \cdot t)}$

C $A = A_0 - e^{(r \cdot t)}$

6 Solve for the final population given this model of a continuous growth of a rabbit population?

$$P = 300 \cdot e^{(0.07 \cdot 4)}$$

A $P = P_0 \cdot e^{(r \cdot t)}$

B $P = P_0 - e^{(r \cdot t)}$

7 Solve for the final population given this model of a continuous growth of an insect population?

$$P = 900 \cdot e^{(0.02 \cdot 5)}$$

A $P = P_0 - e^{(r \cdot t)}$

B $P = P_0 \cdot e^{(r \cdot t)}$

8 Solve for the final population given this model of a continuous growth of a bacteria population?

$$P = 200 \cdot e^{(0.07 \cdot 3)}$$

A $P = P_0 \cdot e^{(r \cdot t)}$

B $P = P_0 \cdot e^{(\frac{r}{t})}$