



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

1 What is the value of the starting population given this model of a continuous growth of an insect population?

$$1,135 = P_0 \cdot e^{(0.07 \cdot 5)}$$

A $P_0 = 800$

B $P_0 = 700$

C $P_0 = 1100$

D $P_0 = 900$

2 What is the value of the starting price given this model of a continuously compounding growth of a share price?

$$539 = S_0 \cdot e^{(0.06 \cdot 5)}$$

A $S_0 = 200$

B $S_0 = 500$

C $S_0 = 300$

D $S_0 = 400$

3 What is the value of the starting price given this model of a continuously compounding growth of a share price?

$$957 = S_0 \cdot e^{(0.09 \cdot 2)}$$

A $S_0 = 900$

B $S_0 = 800$

C $S_0 = 500$

D $S_0 = 1100$

4 What is the value of the starting population given this model of a continuous growth of a rabbit population?

$$838 = P_0 \cdot e^{(0.02 \cdot 9)}$$

A $P_0 = 400$

B $P_0 = 1000$

C $P_0 = 700$

D $P_0 = 500$

5 What is the value of the starting cash given this model of a continuously compounding growth of money in a savings account?

$$1,077 = P_0 \cdot e^{(0.06 \cdot 3)}$$

A $P_0 = 900$

B $P_0 = 1200$

C $P_0 = 700$

D $P_0 = 800$

6 What is the value of the starting population given this model of a continuous growth of a rabbit population?

$$469 = P_0 \cdot e^{(0.08 \cdot 2)}$$

A $P_0 = 600$

B $P_0 = 100$

C $P_0 = 400$

D $P_0 = 300$

7 What is the value of the starting population given this model of a continuous growth of a bacteria population?

$$1,135 = P_0 \cdot e^{(0.05 \cdot 7)}$$

A $P_0 = 500$

B $P_0 = 700$

C $P_0 = 800$

D $P_0 = 900$

8 What is the value of the starting population given this model of a continuous growth of a bacteria population?

$$957 = P_0 \cdot e^{(0.09 \cdot 2)}$$

A $P_0 = 600$

B $P_0 = 700$

C $P_0 = 500$

D $P_0 = 800$