



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

1

Rearrange the exponential equation to solve for for the starting views given this scenario?

A social media post starts with a certain number of views. Its view count grows continually by 2% each month. After 4 months it has 758 views.

A	$V_0 = \frac{758}{e^{(0.02/4)}}$	B	$V_0 = \frac{758}{e^{(0.02 \cdot 4)}}$
C	$V_0 = \frac{e^{(0.02 \cdot 4)}}{758}$		

2

Rearrange the exponential equation to solve for for the starting views given this scenario?

A social media post starts with a certain number of views. Its view count grows continually by 9% each day. After 5 days it has 470 views.

A	$V_0 = \frac{470}{e^{(0.09 \cdot 5)}}$	B	$V_0 = \frac{e^{(0.09 \cdot 5)}}{470}$
C	$V_0 = \frac{470}{e^{(0.09/5)}}$		

3

Rearrange the exponential equation to solve for for the starting cash given this scenario?

A savings account starts with a certain amount of cash. It grows continuously at 5% interest per month. After 7 months it has \$425.

A	$P_0 = \frac{425}{e^{(0.05 \cdot 7)}}$	B	$P_0 = \frac{e^{(0.05 \cdot 7)}}{425}$
C	$P_0 = \frac{425}{e^{(0.05/7)}}$		

4

Rearrange the exponential equation to solve for for the starting downloads given this scenario?

An app starts with a certain number of downloads. Its download count grows continually by 6% each year. After 9 years it has 514 downloads.

A	$A_0 = \frac{e^{(0.06 \cdot 9)}}{514}$	B	$A_0 = \frac{514}{e^{(0.06/9)}}$
C	$A_0 = \frac{514}{e^{(0.06 \cdot 9)}}$		

5

Rearrange the exponential equation to solve for for the starting price given this scenario?

A company's share price starts at a certain value. It grows continuously at 9% growth per month. After 7 months it has a share price of \$563.

A	$S_0 = \frac{563}{e^{(0.09/7)}}$	B	$S_0 = \frac{563}{e^{(0.09 \cdot 7)}}$
C	$S_0 = \frac{e^{(0.09 \cdot 7)}}{563}$		

6

Rearrange the exponential equation to solve for for the starting population given this scenario?

A rabbit population starts at a certain size. It grows continuously at 9% growth per quarter. After 8 quarters it has increased to a population of 1,438 rabbits.

A	$P_0 = \frac{1438}{e^{(0.09/8)}}$	B	$P_0 = \frac{e^{(0.09 \cdot 8)}}{1438}$
C	$P_0 = \frac{1438}{e^{(0.09 \cdot 8)}}$		

7

Rearrange the exponential equation to solve for for the starting cash given this scenario?

A savings account starts with a certain amount of cash. It grows continuously at 7% interest per year. After 2 years it has \$1,035.

A	$P_0 = \frac{1035}{e^{(0.07/2)}}$	B	$P_0 = \frac{e^{(0.07 \cdot 2)}}{1035}$
C	$P_0 = \frac{1035}{e^{(0.07 \cdot 2)}}$		

8

Rearrange the exponential equation to solve for for the starting views given this scenario?

A social media post starts with a certain number of views. Its view count grows continually by 6% each week. After 2 weeks it has 789 views.

A	$V_0 = \frac{789}{e^{(0.06 \cdot 2)}}$	B	$V_0 = \frac{e^{(0.06 \cdot 2)}}{789}$
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