



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

1

Rearrange the exponential equation to solve for for the rate given this scenario?

A social media post starts with 300 views. Its view count grows continually by a certain percent each year. After 8 years it has 525 views.

A  $r = \frac{\ln \frac{300}{525}}{8}$

B  $r = \frac{e^{\frac{525}{300}}}{8}$

C  $r = \frac{\ln \frac{525}{300}}{8}$

2

Rearrange the exponential equation to solve for for the rate given this scenario?

An app starts with 800 downloads. Its download count grows continually by a certain percent each year. After 9 years it has 1,502 downloads.

A  $r = \frac{\ln \frac{1502}{800}}{9}$

B  $r = \frac{\ln \frac{800}{1502}}{9}$

3

Rearrange the exponential equation to solve for for the rate given this scenario?

An app starts with 500 downloads. Its download count grows continually by a certain percent each week. After 9 weeks it has 858 downloads.

A  $r = \frac{\ln \frac{858}{500}}{9}$

B  $r = \frac{e^{\frac{858}{500}}}{9}$

C  $r = \frac{\ln \frac{500}{858}}{9}$

4

Rearrange the exponential equation to solve for for the rate given this scenario?

A company's share price starts at \$500. It grows continuously at a certain percent growth per quarter. After 8 quarters it has a share price of \$586.

A  $r = \frac{\ln \frac{500}{586}}{8}$

B  $r = \frac{\ln \frac{586}{500}}{8}$

C  $r = \frac{e^{\frac{586}{500}}}{8}$

5

Rearrange the exponential equation to solve for for the rate given this scenario?

An app starts with 600 downloads. Its download count grows continually by a certain percent each week. After 2 weeks it has 704 downloads.

A  $r = \frac{e^{\frac{704}{600}}}{2}$

B  $r = \frac{\ln \frac{704}{600}}{2}$

C  $r = \frac{\ln \frac{600}{704}}{2}$

6

Rearrange the exponential equation to solve for for the rate given this scenario?

A social media post starts with 200 views. Its view count grows continually by a certain percent each day. After 4 days it has 225 views.

A  $r = \frac{e^{\frac{225}{200}}}{4}$

B  $r = \frac{\ln \frac{200}{225}}{4}$

C  $r = \frac{\ln \frac{225}{200}}{4}$

7

Rearrange the exponential equation to solve for for the rate given this scenario?

An insect population starts at 400. It grows continuously at a certain percent growth per day. After 7 days it has increased to a population of 460.

A  $r = \frac{e^{\frac{460}{400}}}{7}$

B  $r = \frac{\ln \frac{400}{460}}{7}$

C  $r = \frac{\ln \frac{460}{400}}{7}$

8

Rearrange the exponential equation to solve for for the rate given this scenario?

A company's share price starts at \$200. It grows continuously at a certain percent growth per year. After 3 years it has a share price of \$232.

A  $r = \frac{e^{\frac{232}{200}}}{3}$

B  $r = \frac{\ln \frac{200}{232}}{3}$

C  $r = \frac{\ln \frac{232}{200}}{3}$