



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

1

What is the value of the starting downloads given this scenario?

An app starts with a certain number of downloads. Its download count grows continually by 6% each month. After 2 months it has 450 downloads.

$$^A A_0 = 400 \quad ^B A_0 = 600$$

$$^C A_0 = 700 \quad ^D A_0 = 100$$

2

What is the value of the starting population given this scenario?

An insect population starts at a certain size. It grows continuously at 7% growth per day. After 8 days it has increased to a population of 525.

$$^A P_0 = 500 \quad ^B P_0 = 200$$

$$^C P_0 = 600 \quad ^D P_0 = 300$$

3

What is the value of the starting downloads given this scenario?

An app starts with a certain number of downloads. Its download count grows continually by 3% each month. After 4 months it has 225 downloads.

$$^A A_0 = 200 \quad ^B A_0 = 400$$

$$^C A_0 = 500 \quad ^D A_0 = 100$$

4

What is the value of the starting cash given this scenario?

A savings account starts with a certain amount of cash. It grows continuously at 6% interest per quarter. After 2 quarters it has \$563.

$$^A P_0 = 500 \quad ^B P_0 = 300$$

$$^C P_0 = 600 \quad ^D P_0 = 800$$

5

What is the value of the starting debt given this scenario?

A credit card starts with a certain amount of debt. It grows continuously at 9% interest per year. After 4 years the debt has grown to \$1,003.

$$^A D_0 = 600 \quad ^B D_0 = 700$$

$$^C D_0 = 400 \quad ^D D_0 = 900$$

6

What is the value of the starting price given this scenario?

A company's share price starts at a certain value. It grows continuously at 7% growth per year. After 4 years it has a share price of \$264.

$$^A S_0 = 400 \quad ^B S_0 = 200$$

$$^C S_0 = 500 \quad ^D S_0 = 300$$

7

What is the value of the starting cash given this scenario?

A savings account starts with a certain amount of cash. It grows continuously at 4% interest per month. After 9 months it has \$429.

$$^A P_0 = 100 \quad ^B P_0 = 300$$

$$^C P_0 = 200 \quad ^D P_0 = 500$$

8

What is the value of the starting price given this scenario?

A company's share price starts at a certain value. It grows continuously at 7% growth per quarter. After 4 quarters it has a share price of \$396.

$$^A S_0 = 400 \quad ^B S_0 = 200$$

$$^C S_0 = 100 \quad ^D S_0 = 300$$