Name

1

A charitable endowment starts with $400. Each monthly it disburses a certain percent of its remaining funds. After 6 months its funds have decreased to $294.

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

A $r = -(\frac{294}{400})^{\frac{1}{6}} - 1$ B $r = -(\frac{294}{400})^{\frac{6}{2}} - 1$

C $r = +(\frac{294}{400})^{\frac{1}{6}} + 1$

2

A whale population starts at 300. Each subsequent year it declines by a certain percent. After 6 years it has decreased to a population of 265 whales.

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

A $r = +(\frac{265}{300})^{\frac{1}{6}} + 1$ B $r = -(\frac{265}{300})^{\frac{6}{2}} - 1$

C $r = -(\frac{265}{300})^{\frac{1}{6}} - 1$

3

A whale population starts at 800. Each subsequent year it declines by a certain percent. After 4 years it has decreased to a population of 598 whales.

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

A $r = -(\frac{598}{800})^{\frac{1}{4}} - 1$ B $r = +(\frac{598}{800})^{\frac{1}{4}} + 1$

C $r = -(\frac{598}{800})^{\frac{4}{2}} - 1$

4

A toxin starts at a concentration of 600mg/L. Each hourly dialysis reduces it by a certain percent. After 2 hours it has decreased to a concentration of 552mg/L.

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

A $r = -(\frac{552}{600})^{\frac{1}{2}} - 1$ B $r = +(\frac{552}{600})^{\frac{1}{2}} + 1$

5

A charitable endowment starts with $600. Each monthly it disburses a certain percent of its remaining funds. After 9 months its funds have decreased to $415.

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

A $r = -(\frac{415}{600})^{\frac{9}{2}} - 1$ B $r = +(\frac{415}{600})^{\frac{1}{9}} + 1$

C $r = -(\frac{415}{600})^{\frac{1}{9}} - 1$

6

A bird population starts at 300. Each subsequent year it declines by a certain percent. After 8 years it has decreased to a population of 216.

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

A $r = -(\frac{216}{300})^{\frac{8}{2}} - 1$ B $r = -(\frac{216}{300})^{\frac{1}{8}} - 1$

C $r = +(\frac{216}{300})^{\frac{1}{8}} + 1$

7

A charitable endowment starts with $500. Each yearly it disburses a certain percent of its remaining funds. After 9 years its funds have decreased to $286.

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

A $r = +(\frac{286}{500})^{\frac{1}{9}} + 1$ B $r = -(\frac{286}{500})^{\frac{1}{9}} - 1$

C $r = -(\frac{286}{500})^{\frac{9}{2}} - 1$

8

A bird population starts at 300. Each subsequent year it declines by a certain percent. After 7 years it has decreased to a population of 209.

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

A $r = -(\frac{209}{300})^{\frac{1}{7}} - 1$ B $r = +(\frac{209}{300})^{\frac{1}{7}} + 1$

C $r = -(\frac{209}{300})^{\frac{7}{2}} - 1$