mobius

Name

1

A charitable endowment starts with $300. Each daily it disburses a certain percent of its remaining funds. After 5 days its funds have decreased to $271.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$	$r = -(\frac{P}{P_0})^{\frac{t}{2}} - 1$

2

A whale population starts at 300. Each subsequent year it declines by a certain percent. After 9 years it has decreased to a population of 156 whales.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{t}{2}} - 1$	$r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$
C $r = -(\frac{P}{P_0})^{\frac{1}{t}} + 1$	

3

A whale population starts at 600. Each subsequent year it declines by a certain percent. After 3 years it has decreased to a population of 452 whales.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{1}{t}} + 1$	$r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$
C $r = -(\frac{P}{P_0})^{\frac{t}{2}} - 1$	

4

A bird population starts at 500. Each subsequent year it declines by a certain percent. After 2 years it has decreased to a population of 432.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$	$r = -(\frac{P}{P_0})^{\frac{1}{t}} + 1$
C $r = -(\frac{P}{P_0})^{\frac{t}{2}} - 1$	

5

A whale population starts at 600. Each subsequent year it declines by a certain percent. After 7 years it has decreased to a population of 520 whales.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{1}{t}} + 1$	$r = -(\frac{P}{P_0})^{\frac{t}{2}} - 1$
C $r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$	

6

A charitable endowment starts with $500. Each weekly it disburses a certain percent of its remaining funds. After 8 weeks its funds have decreased to $360.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$	$r = -(\frac{P}{P_0})^{\frac{1}{t}} + 1$

7

A whale population starts at 700. Each subsequent year it declines by a certain percent. After 6 years it has decreased to a population of 620 whales.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{P}{P_0})^{\frac{1}{t}} + 1$	$r = -(\frac{P}{P_0})^{\frac{t}{2}} - 1$
C $r = -(\frac{P}{P_0})^{\frac{1}{t}} - 1$	

8

A toxin starts at a concentration of 900mg/L. Each daily dialysis reduces it by a certain percent. After 2 days it has decreased to a concentration of 795mg/L.

How would you solve for the rate given this scenario?

A	B
$r = -(\frac{C}{C_0})^{\frac{1}{t}} + 1$	$r = -(\frac{C}{C_0})^{\frac{1}{t}} - 1$
C $r = -(\frac{C}{C_0})^{\frac{t}{2}} - 1$	