



Exponential Function Solving - Decay (Discrete) Scenario to Rate

1

What is the value of the rate given this scenario?

A bird population starts at 600. Each subsequent year it declines by a certain percent. After 8 years it has decreased to a population of 510.

A $r = 3\%$	B $r = 6\%$
C $r = 2\%$	D $r = 5\%$

2

What is the value of the rate given this scenario?

A toxin starts at a concentration of 800mg/L. Each daily dialysis reduces it by a certain percent. After 6 days it has decreased to a concentration of 454mg/L.

A $r = 10\%$	B $r = 7\%$
C $r = 9\%$	D $r = 14\%$

3

What is the value of the rate given this scenario?

A bird population starts at 400. Each subsequent year it declines by a certain percent. After 2 years it has decreased to a population of 345.

A $r = 12\%$	B $r = 4\%$
C $r = 7\%$	D $r = 9\%$

4

What is the value of the rate given this scenario?

A toxin starts at a concentration of 200mg/L. Each daily dialysis reduces it by a certain percent. After 3 days it has decreased to a concentration of 150mg/L.

A $r = 12\%$	B $r = 10\%$
C $r = 6\%$	D $r = 9\%$

5

What is the value of the rate given this scenario?

A charitable endowment starts with \$700. Each weekly it disburses a certain percent of its remaining funds. After 6 weeks its funds have decreased to \$424.

A $r = 3\%$	B $r = 8\%$
C $r = 7\%$	D $r = 10\%$

6

What is the value of the rate given this scenario?

A whale population starts at 500. Each subsequent year it declines by a certain percent. After 9 years it has decreased to a population of 416 whales.

A $r = 1\%$	B $r = 2\%$
C $r = 4\%$	D $r = 5\%$

7

What is the value of the rate given this scenario?

A toxin starts at a concentration of 900mg/L. Each monthly dialysis reduces it by a certain percent. After 2 months it has decreased to a concentration of 846mg/L.

A $r = 4\%$	B $r = 7\%$
C $r = 3\%$	D $r = 8\%$

8

What is the value of the rate given this scenario?

A charitable endowment starts with \$800. Each weekly it disburses a certain percent of its remaining funds. After 7 weeks its funds have decreased to \$518.

A $r = 5\%$	B $r = 4\%$
C $r = 2\%$	D $r = 6\%$