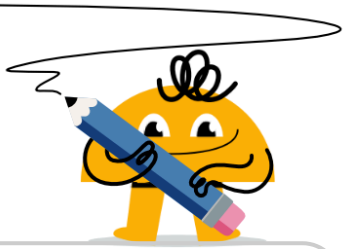
Name



Exponential Function Solving - Decay (Discrete) - Scenario to Time

1

A charitable endowment starts with $800. Each yearly it disburses 3% of its remaining funds. After a certain number of years its funds have decreased to $752.

What is the value of the time given this scenario?

A $t = 1$ year	B $t = 4$ years
C $t = 3$ years	D $t = 2$ years

2

A bird population starts at 800. Each subsequent year it declines by 5%. After a certain number of years it has decreased to a population of 651.

What is the value of the time given this scenario?

A $t = 6$ years	B $t = 5$ years
C $t = 4$ years	D $t = 3$ years

3

A whale population starts at 700. Each subsequent year it declines by 6%. After a certain number of years it has decreased to a population of 513 whales.

What is the value of the time given this scenario?

A $t = 4$ years	B $t = 7$ years
C $t = 3$ years	D $t = 5$ years

4

A whale population starts at 700. Each subsequent year it declines by 9%. After a certain number of years it has decreased to a population of 579 whales.

What is the value of the time given this scenario?

A $t = 3$ years	B $t = 2$ years
C $t = 4$ years	D $t = 1$ year

5

A toxin starts at a concentration of 500mg/L. Each daily dialysis reduces it by 8%. After a certain number of days it has decreased to a concentration of 358mg/L.

What is the value of the time given this scenario?

A $t = 2$ days	B $t = 4$ days
C $t = 6$ days	D $t = 5$ days

6

A charitable endowment starts with $600. Each yearly it disburses 7% of its remaining funds. After a certain number of years its funds have decreased to $448.

What is the value of the time given this scenario?

A $t = 4$ years	B $t = 6$ years
C $t = 3$ years	D $t = 5$ years

7

A toxin starts at a concentration of 900mg/L. Each daily dialysis reduces it by 4%. After a certain number of days it has decreased to a concentration of 676mg/L.

What is the value of the time given this scenario?

A $t = 7$ days	B $t = 8$ days
C $t = 6$ days	D $t = 5$ days

8

A whale population starts at 200. Each subsequent year it declines by 7%. After a certain number of years it has decreased to a population of 129 whales.

What is the value of the time given this scenario?

A $t = 7$ years	B $t = 4$ years
C $t = 5$ years	D $t = 6$ years