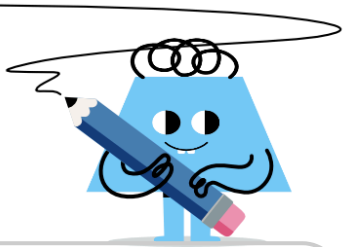
Name



Exponential Function Decay (Continuous) - Equation to Scenario

1 Which scenario describes this equation?

$$596 = 700 \cdot e^{(-0.02 \cdot 8)}$$

A. A whale population starts at 700. It declines continuously at 2% per year. After 8 years it has

B. A whale population starts at 800. It declines continuously at 2% per year. After 7 years it has

2 Which scenario describes this equation?

$$723 = 800 \cdot e^{(-0.05 \cdot 2)}$$

A. A bacteria population starts at 200. It declines continuously at 5% per year. After 8 years it has

B. A bacteria population starts at 800. It declines continuously at 5% per year. After 2 years it has

3 Which scenario describes this equation?

$$532 = 600 \cdot e^{(-0.03 \cdot 4)}$$

A. A whale population starts at 600. It declines continuously at 3% per quarter. After 4 quarters it

B. A whale population starts at 400. It declines continuously at 3% per quarter. After 6 quarters it

4 Which scenario describes this equation?

$$123 = 200 \cdot e^{(-0.06 \cdot 8)}$$

A. A radioactive material starts at an isotope concentration of 200ppm. It decays continuously

B. A radioactive material starts at an isotope concentration of 600ppm. It decays continuously

5 Which scenario describes this equation?

$$159 = 300 \cdot e^{(-0.09 \cdot 7)}$$

A. A whale population starts at 300. It declines continuously at 9% per year. After 7 years it has

B. A whale population starts at 900. It declines continuously at 3% per year. After 7 years it has

6 Which scenario describes this equation?

$$217 = 300 \cdot e^{(-0.04 \cdot 8)}$$

A. A radioactive material starts at an isotope concentration of 800ppm. It decays continuously

B. A radioactive material starts at an isotope concentration of 300ppm. It decays continuously

7 Which scenario describes this equation?

$$486 = 600 \cdot e^{(-0.03 \cdot 7)}$$

A. A toxin starts at a concentration of 600mg/L. It declines continuously at 3% per hour. After 7

B. A toxin starts at a concentration of 300mg/L. It declines continuously at 6% per hour. After 7

8 Which scenario describes this equation?

$$361 = 400 \cdot e^{(-0.02 \cdot 5)}$$

A. A bacteria population starts at 500. It declines continuously at 2% per day. After 4 days it has

B. A bacteria population starts at 400. It declines continuously at 2% per day. After 5 days it has