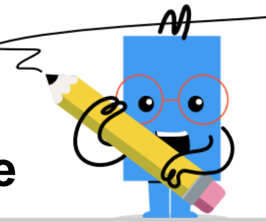
Name

mobius



Exponential Function Solving - Decay (Continuous) Equation to Starting Value

1 Solve for the starting concentration given this model of a continuous decay of a radioactive material?

$$830 = R_0 \cdot e^{(-0.02 \cdot 4)}$$

A $R_0 = \frac{R}{e^{(-r \cdot t)}}$	B $0 + R_0 = \frac{R}{e^{(\frac{-r}{t})}}$
C $2 + R_0 = \frac{e^{(-r \cdot t)}}{R}$	D $4 + R_0 = \frac{e^{(-r \cdot t)}}{R}$

2 Solve for the starting concentration given this model of a continuous decay of a radioactive material?

$$534 = R_0 \cdot e^{(-0.03 \cdot 9)}$$

A $0 + R_0 = \frac{e^{(-r \cdot t)}}{R}$	B $9 + R_0 = \frac{R}{e^{(\frac{-r}{t})}}$
C $2 + R_0 = \frac{R}{e^{(\frac{-r}{t})}}$	D $R_0 = \frac{R}{e^{(-r \cdot t)}}$

3 Solve for the starting population given this model of a continuous decline of a whale population?

$$466 = P_0 \cdot e^{(-0.09 \cdot 6)}$$

A $0 + P_0 = \frac{e^{(-r \cdot t)}}{P}$	B $9 + P_0 = \frac{e^{(-r \cdot t)}}{P}$
C $P_0 = \frac{P}{e^{(-r \cdot t)}}$	D $2 + P_0 = \frac{e^{(-r \cdot t)}}{P}$

4 Solve for the starting population given this model of a a continuously declining bacteria population?

$$347 = P_0 \cdot e^{(-0.02 \cdot 7)}$$

A $P_0 = \frac{P}{e^{(-r \cdot t)}}$	B $8 + P_0 = \frac{e^{(-r \cdot t)}}{P}$
C $6 + P_0 = \frac{e^{(-r \cdot t)}}{P}$	D $4 + P_0 = \frac{e^{(-r \cdot t)}}{P}$

5 Solve for the starting population given this model of a a continuously declining bacteria population?

$$213 = P_0 \cdot e^{(-0.09 \cdot 7)}$$

A $4 + P_0 = \frac{P}{e^{(\frac{-r}{t})}}$	B $3 + P_0 = \frac{P}{e^{(\frac{-r}{t})}}$
C $P_0 = \frac{P}{e^{(-r \cdot t)}}$	D $6 + P_0 = \frac{P}{e^{(\frac{-r}{t})}}$

6 Solve for the starting concentration given this model of a continuous decay of a radioactive material?

$$140 = R_0 \cdot e^{(-0.05 \cdot 7)}$$

A $4 + R_0 = \frac{R}{e^{(\frac{-r}{t})}}$	B $R_0 = \frac{R}{e^{(-r \cdot t)}}$
C $3 + R_0 = \frac{e^{(-r \cdot t)}}{R}$	D $2 + R_0 = \frac{R}{e^{(\frac{-r}{t})}}$

7 Solve for the starting concentration given this model of a continuous reduction of a toxin concentration?

$$458 = C_0 \cdot e^{(-0.03 \cdot 9)}$$

A $0 + C_0 = \frac{C}{e^{(\frac{-r}{t})}}$	B $1 + C_0 = \frac{e^{(-r \cdot t)}}{C}$
C $C_0 = \frac{C}{e^{(-r \cdot t)}}$	D $6 + C_0 = \frac{C}{e^{(\frac{-r}{t})}}$

8 Solve for the starting concentration given this model of a continuous reduction of a toxin concentration?

$$521 = C_0 \cdot e^{(-0.02 \cdot 7)}$$

A $C_0 = \frac{C}{e^{(-r \cdot t)}}$	B $0 + C_0 = \frac{e^{(-r \cdot t)}}{C}$
C $6 + C_0 = \frac{C}{e^{(\frac{-r}{t})}}$	D $3 + C_0 = \frac{e^{(-r \cdot t)}}{C}$