

mobius

Exponential Function Solution Equation - Decay (Continuous) Equation to Rate



Rearrange this equation to solve for the rate given this model of a continuous decline of a whale population?

$$162 = 200 \cdot e^{(-r \cdot 7)}$$

$$471 = 600 \cdot e^{(-r \cdot 3)}$$

$$\left| egin{array}{c} oldsymbol{^{\mathsf{A}}} = -rac{\mathsf{ln}}{7} rac{162}{7}
ight|^{\mathsf{B}} oldsymbol{r} = -rac{e^{rac{162}{200}}}{7}
ight|^{\mathsf{C}} = -rac{\mathsf{ln}}{rac{200}{162}}
ight|^{\mathsf{C}}$$

$$r = -rac{\lnrac{471}{600}}{3}$$
 $r = -rac{\lnrac{6}{4}}{3}$

Rearrange this equation to solve for the rate given this model of a continuous decline of a whale population?

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

$$680 = 900 \cdot e^{(-r \cdot 4)}$$

$$r=-rac{\lnrac{400}{361}}{5}
ight|^{ ext{B}}r=-rac{\lnrac{361}{400}}{5}
ight|^{ ext{c}}r=-rac{e^{rac{361}{400}}}{5}$$

$$r=-rac{\lnrac{900}{680}}{4}
ight|^{ extsf{B}}r=-rac{\lnrac{680}{900}}{4}
ight|^{ extsf{c}}r=-rac{e^{rac{680}{900}}}{4}$$

Rearrange this equation to solve for the rate given this model of a continuous decline of a bird population?

$$157 = 200 \cdot e^{(-r \cdot 8)}$$

Rearrange this equation to solve for the rate given this model of a continuous decline of a whale population?

$$334 = 400 \cdot e^{(-r \cdot 9)}$$

$$r = -rac{\lnrac{200}{157}}{8} r = -rac{e^{rac{157}{200}}}{8} r = -rac{e^{rac{157}{200}}}{8} r = -rac{\lnrac{157}{200}}{8} r = -rac{\lnrac{157}{200}}{8} r = -rac{\lnrac{334}{400}}{9} r = -rac{\lnrac{400}{334}}{9} r = -rac{e^{rac{334}{400}}}{9} r = -rac{e^{$$

Rearrange this equation to solve for the rate given this model of a continuous reduction of a toxin concentration?

$$461 = 500 \cdot e^{(-r \cdot 2)}$$

$$707 = 900 \cdot e^{(-r \cdot 4)}$$

$$r = -rac{\lnrac{500}{461}}{2} r = -rac{e^{rac{461}{500}}}{2} r = -rac{e^{rac{461}{500}}}{2} r = -rac{\lnrac{461}{500}}{2} r = -rac{\lnrac{461}{500}}{2} r = -rac{\lnrac{900}{707}}{4} r = -rac{e^{rac{707}{900}}}{4} r = -rac{\lnrac{707}{900}}{4}$$