

mobius

Exponential Function Solution Equation -Growth (Continuous) - Equation to Time



Rearrange this equation to solve for the time given this model of a continuous exponential growth of social media post views?

Rearrange this equation to solve for the time given this model of a continuous growth of a bacteria population?

$$|1,372=800\cdot e^{(0.06\cdot t)}|$$

525	= 300	$\cdot e^{(0.08\cdot t)}$
525	— 300	· E` ′

Α	$t=+rac{\lnrac{1372}{800}}{0.06}$	$B t = -\frac{\ln 1372 \cdot 800}{0.06}$	Α	$t = -\frac{\ln 525 \cdot 300}{0.08}$	$B t = +\frac{\ln\frac{525}{300}}{0.08}$
С	$t = + rac{0.06}{\lnrac{1372}{800}}$		С	$t = +rac{0.08}{lnrac{525}{300}}$	

3 Rearrange this equation to solve for the time given this model of a continuous exponential growth of social media post views?

Rearrange this equation to solve for the time given this model of a continuous growth of a rabbit population?

1, 369 = 900
$$\cdot e^{(0.07 \cdot t)}$$

$$598 = 500 \cdot e^{(0.06 \cdot t)}$$

Α	$t=-\frac{ln1369\cdot900}{0.07}$	B $t = +\frac{0.07}{\ln \frac{1369}{900}}$
С	$t = + rac{ln rac{1369}{900}}{0.07}$	

$$t = +rac{\mathsf{ln}\,rac{598}{500}}{\mathsf{0.06}}$$

$$t = -rac{\ln 598 \cdot 500}{0.06}$$

- 5 Rearrange this equation to solve for the time given this model of a continuous exponential growth of social media post views?
- Rearrange this equation to solve for the time given this model of a growth of debt on a credit card with continuous compounding?

$$|1,144=900\cdot e^{(0.08\cdot t)}|$$

1, 144
$$=$$
 900 \cdot $e^{(0.08 \cdot t)}$ 1, 016 $=$ 800 \cdot $e^{(0.04 \cdot t)}$

Α	$t=+rac{{\sf ln}rac{1144}{900}}{0.08}$	B $t = -\frac{\ln 1144 \cdot 900}{0.08}$	Α	$t=+rac{lnrac{1016}{800}}{0.04}$	$b t = + \frac{0.04}{\ln \frac{1016}{800}}$
С	$t = + rac{0.08}{\lnrac{1144}{900}}$		С	$t=-\frac{\ln 1016\cdot 800}{0.04}$	

- 7 Rearrange this equation to solve for the time given this model of a continuously compounding growth of money in a savings account?
- Rearrange this equation to solve for the time given this model of a continuous exponential growth of social media post views?

$$|1,035=900\cdot e^{(0.02\cdot t)}|$$

$$|1,232=600\cdot e^{(0.09\cdot t)}|$$

$$t = -rac{\ln 1035 \cdot 900}{0.02} binom{s}{t} = +rac{\ln rac{1035}{900}}{0.02} binom{s}{t} = -rac{\ln 1232 \cdot 600}{0.09} binom{s}{t} = +rac{\ln rac{1232}{600}}{0.09}$$