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7

mobius

Exponential Function Solution Equation - Growth (Continuous, Mis-matched Time



Rearrange this equation to solve for the rate given this model of a

Rearrange this equation to solve for the rate given this model of continuously compounding growth of a share price?

$$261 - 200 \cdot e^{(r \cdot 9 \cdot 12)}$$

Rearrange this equation to solve for the rate given this model of a continuously compounding growth of money in a savings account?

$$567 = 400 \cdot e^{(r \cdot \frac{5}{4})}$$

$$r = rac{ \mathsf{ln} \, rac{261}{200}}{ \mathsf{9} \cdot \mathsf{12}}
brack^{\mathtt{B}} r = rac{ \mathsf{ln} \, rac{200}{261}}{rac{9}{12}}
brack^{\mathtt{C}} r = rac{e^{rac{261}{200}}}{ \mathsf{9} \cdot \mathsf{12}}$$

$$508 - 400 \cdot e^{(r \cdot 8 \cdot 12)}$$

$$r=rac{e^{rac{508}{400}}}{8\cdot 12}igg|^{ ext{B}} r=rac{\lnrac{400}{508}}{rac{8}{12}}igg|^{ ext{C}} =rac{\lnrac{508}{400}}{8\cdot 12}$$

$$313 = 200 \cdot e^{(r \cdot rac{5}{7})}$$
 $r = rac{\ln rac{313}{200}}{rac{5}{7}} r = rac{\ln rac{20}{31}}{5 \cdot 7}$

Rearrange this equation to solve for the rate given this model of a growth of debt on a credit card with continuous compounding?

1, 372 = 800
$$\cdot e^{(r \cdot \frac{6}{4})}$$

$$r=rac{\mathsf{ln}\left(rac{400}{567}
ight)^{\mathsf{B}}}{\mathsf{F}\left(rac{4}{5}
ight)^{\mathsf{B}}}r=rac{e^{rac{567}{400}}}{rac{5}{2}}
ight)^{\mathsf{C}}r=rac{\mathsf{ln}\left(rac{567}{400}
ight)}{rac{5}{2}}$$

Rearrange this equation to solve for the rate given this model of a continuously compounding growth of app downloads?

$$826 = 600 \cdot e^{(r \cdot 8 \cdot 7)}$$

$$r=rac{e^{rac{826}{600}}}{8\cdot 7} \left| egin{matrix} ^{ ext{ iny B}} & = rac{\lnrac{826}{600}}{8\cdot 7}
ight| ^{ ext{ iny C}} & = rac{\lnrac{600}{826}}{rac{8}{7}}
ight|$$

Rearrange this equation to solve for the rate given this model of a growth of debt on a credit card with continuous compounding?

$$751 = 400 \cdot e^{(r \cdot 7 \cdot 4)}$$

$$r = rac{ \mathsf{In} \; rac{751}{400}}{7 \cdot \mathsf{4}} igg|^{\mathsf{B}} r = rac{e^{rac{751}{400}}}{7 \cdot \mathsf{4}} igg|^{\mathsf{c}} r = rac{ \mathsf{In} \; rac{400}{751}}{rac{7}{4}}$$

Rearrange this equation to solve for the rate given this model of a continuous growth of an insect population?

$$596 = 400 \cdot e^{(r \cdot 5 \cdot 7)}$$

$$r = rac{\lnrac{400}{596}}{rac{5}{7}} \left| egin{matrix} {}^{
m B} \ r = rac{e^{rac{596}{400}}}{5\cdot 7}
ight| ^{
m C} = rac{\lnrac{596}{400}}{5\cdot 7}
ight|$$