



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

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

$$586 = 500 \cdot e^{(r \cdot 2)}$$

A $r = \frac{\ln \frac{586}{500}}{2}$	B $r = \frac{e^{\frac{586}{500}}}{2}$	C $r = \frac{\ln \frac{500}{586}}{2}$
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2 Rearrange this equation to solve for the rate given this model of a continuously compounding growth of a share price?

$$1,217 = 800 \cdot e^{(r \cdot 7)}$$

A $r = \frac{\ln \frac{1217}{800}}{7}$	B $r = \frac{e^{\frac{1217}{800}}}{7}$
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3 Rearrange this equation to solve for the rate given this model of a continuous growth of a rabbit population?

$$523 = 400 \cdot e^{(r \cdot 3)}$$

A $r = \frac{\ln \frac{400}{523}}{3}$	B $r = \frac{\ln \frac{523}{400}}{3}$	C $r = \frac{e^{\frac{523}{400}}}{3}$
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4 Rearrange this equation to solve for the rate given this model of a continuously compounding growth of money in a savings account?

$$1,575 = 900 \cdot e^{(r \cdot 8)}$$

A $r = \frac{e^{\frac{1575}{900}}}{8}$	B $r = \frac{\ln \frac{900}{1575}}{8}$	C $r = \frac{\ln \frac{1575}{900}}{8}$
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5 Rearrange this equation to solve for the rate given this model of a continuous growth of a rabbit population?

$$514 = 300 \cdot e^{(r \cdot 6)}$$

A $r = \frac{e^{\frac{514}{300}}}{6}$	B $r = \frac{\ln \frac{300}{514}}{6}$	C $r = \frac{\ln \frac{514}{300}}{6}$
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6 Rearrange this equation to solve for the rate given this model of a continuous growth of a rabbit population?

$$478 = 400 \cdot e^{(r \cdot 9)}$$

A $r = \frac{\ln \frac{400}{478}}{9}$	B $r = \frac{\ln \frac{478}{400}}{9}$	C $r = \frac{e^{\frac{478}{400}}}{9}$
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7 Rearrange this equation to solve for the rate given this model of a growth of debt on a credit card with continuous compounding?

$$381 = 300 \cdot e^{(r \cdot 4)}$$

A $r = \frac{e^{\frac{381}{300}}}{4}$	B $r = \frac{\ln \frac{381}{300}}{4}$	C $r = \frac{\ln \frac{300}{381}}{4}$
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8 Rearrange this equation to solve for the rate given this model of a continuously compounding growth of app downloads?

$$598 = 500 \cdot e^{(r \cdot 9)}$$

A $r = \frac{\ln \frac{500}{598}}{9}$	B $r = \frac{e^{\frac{598}{500}}}{9}$	C $r = \frac{\ln \frac{598}{500}}{9}$
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