



Exponential Function Solving - Growth (Continuous) Equation to Rate

- 1 What is the value of the rate given this model of a continuous growth of a bacteria population?

$$758 = 700 \cdot e^{(r \cdot 4)}$$

A	B	C	D
$r = 2\%$	$r = 3\%$	$r = 7\%$	$r = 6\%$

- 2 What is the value of the rate given this model of a continuous growth of a rabbit population?

$$484 = 300 \cdot e^{(r \cdot 6)}$$

A	$r = 11\%$	B	$r = 8\%$
C	$r = 10\%$	D	$r = 12\%$

- 3 What is the value of the rate given this model of a continuous growth of an insect population?

$$424 = 400 \cdot e^{(r \cdot 3)}$$

A	B	C	D
$r = 1\%$	$r = 7\%$	$r = 2\%$	$r = 3\%$

- 4 What is the value of the rate given this model of a continuously compounding growth of app downloads?

$$1,438 = 700 \cdot e^{(r \cdot 8)}$$

A	$r = 4\%$	B	$r = 9\%$
C	$r = 11\%$	D	$r = 7\%$

- 5 What is the value of the rate given this model of a continuously compounding growth of app downloads?

$$1,438 = 700 \cdot e^{(r \cdot 9)}$$

A	$r = 8\%$	B	$r = 6\%$
C	$r = 12\%$	D	$r = 3\%$

- 6 What is the value of the rate given this model of a continuously compounding growth of money in a savings account?

$$1,277 = 900 \cdot e^{(r \cdot 7)}$$

A	B	C	D
$r = 1\%$	$r = 5\%$	$r = 3\%$	$r = 6\%$

- 7 What is the value of the rate given this model of a growth of debt on a credit card with continuous compounding?

$$859 = 600 \cdot e^{(r \cdot 4)}$$

A	$r = 14\%$	B	$r = 9\%$
C	$r = 10\%$	D	$r = 11\%$

- 8 What is the value of the rate given this model of a growth of debt on a credit card with continuous compounding?

$$901 = 800 \cdot e^{(r \cdot 3)}$$

A	B	C	D
$r = 4\%$	$r = 3\%$	$r = 5\%$	$r = 9\%$