



Exponential Function Solving - Decay (Continuous) Equation to Rate

- 1 What is the value of the rate given this model of a continuous reduction of a toxin concentration?

$$830 = 900 \cdot e^{(-r \cdot 4)}$$

A	B	C	D
$r = 1\%$	$r = 7\%$	$r = 6\%$	$r = 2\%$

- 2 What is the value of the rate given this model of a continuous decline of a whale population?

$$591 = 900 \cdot e^{(-r \cdot 7)}$$

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

- 3 What is the value of the rate given this model of a continuous decline of a whale population?

$$172 = 200 \cdot e^{(-r \cdot 3)}$$

A	B	C	D
$r = 5\%$	$r = 3\%$	$r = 7\%$	$r = 8\%$

- 4 What is the value of the rate given this model of a continuous decline of a whale population?

$$417 = 500 \cdot e^{(-r \cdot 9)}$$

A	B	C	D
$r = 4\%$	$r = 5\%$	$r = 2\%$	$r = 3\%$

- 5 What is the value of the rate given this model of a a continuously declining bacteria population?

$$213 = 400 \cdot e^{(-r \cdot 9)}$$

A	$r = 8\%$	B	$r = 7\%$
C	$r = 4\%$	D	$r = 11\%$

- 6 What is the value of the rate given this model of a continuous decline of a whale population?

$$222 = 300 \cdot e^{(-r \cdot 6)}$$

A	$r = 5\%$	B	$r = 9\%$
C	$r = 10\%$	D	$r = 4\%$

- 7 What is the value of the rate given this model of a a continuously declining bacteria population?

$$514 = 900 \cdot e^{(-r \cdot 7)}$$

A	$r = 8\%$	B	$r = 10\%$
C	$r = 7\%$	D	$r = 9\%$

- 8 What is the value of the rate given this model of a continuous decline of a whale population?

$$603 = 900 \cdot e^{(-r \cdot 5)}$$

A	B	C	D
$r = 7\%$	$r = 8\%$	$r = 4\%$	$r = 6\%$