



Exponential Function Solving - Decay (Discrete) Equation to Rate

1 What is the value of the rate given this model of a decline of a toxin concentration (monthly dialysis)?

$$161 = 200 \cdot (1 - r)^{(7)}$$

A	B	C	D
$r = 3\%$	$r = 4\%$	$r = 5\%$	$r = 1\%$

2 What is the value of the rate given this model of a balance of a charitable endowment (yearly disbursements)?

$$666 = 800 \cdot (1 - r)^{(6)}$$

A	B	C	D
$r = 2\%$	$r = 3\%$	$r = 6\%$	$r = 4\%$

3 What is the value of the rate given this model of a balance of a charitable endowment (weekly disbursements)?

$$747 = 900 \cdot (1 - r)^{(3)}$$

A	B	C	D
$r = 6\%$	$r = 8\%$	$r = 5\%$	$r = 4\%$

4 What is the value of the rate given this model of a decline of a whale population (yearly breeding cycle)?

$$846 = 900 \cdot (1 - r)^{(2)}$$

A	B	C	D
$r = 2\%$	$r = 3\%$	$r = 6\%$	$r = 8\%$

5 What is the value of the rate given this model of a decline of a bird population (yearly breeding cycle)?

$$209 = 300 \cdot (1 - r)^{(7)}$$

A	B	C	D
$r = 1\%$	$r = 7\%$	$r = 6\%$	$r = 5\%$

6 What is the value of the rate given this model of a decline of a toxin concentration (monthly dialysis)?

$$416 = 500 \cdot (1 - r)^{(9)}$$

A	B	C	D
$r = 4\%$	$r = 7\%$	$r = 2\%$	$r = 6\%$

7 What is the value of the rate given this model of a decline of a toxin concentration (hourly dialysis)?

$$620 = 700 \cdot (1 - r)^{(6)}$$

A	B	C	D
$r = 4\%$	$r = 5\%$	$r = 2\%$	$r = 6\%$

8 What is the value of the rate given this model of a decline of a toxin concentration (hourly dialysis)?

$$545 = 900 \cdot (1 - r)^{(6)}$$

A	B
$r = 9\%$	$r = 8\%$
C	D
$r = 12\%$	$r = 5\%$