



Exponential Function Solving - Growth (Discrete) Scenario to Rate

1

What is the value of the rate given this scenario?

An insect population starts at 500. Each subsequent yearly breeding season it grows by a certain percent. After 2 years it has increased to a population of 561.

- | | |
|--------------|--------------|
| A $r = 2\%$ | B $r = 10\%$ |
| C $r = 11\%$ | D $r = 6\%$ |
| | |

2

What is the value of the rate given this scenario?

A rabbit population starts at 700. Each subsequent yearly breeding season it grows by a certain percent. After 4 years it has increased to a population of 757 rabbits.

- | | |
|-------------|-------------|
| A $r = 5\%$ | B $r = 2\%$ |
| C $r = 7\%$ | D $r = 4\%$ |
| | |

3

What is the value of the rate given this scenario?

An insect population starts at 900. Each subsequent yearly breeding season it grows by a certain percent. After 2 years it has increased to a population of 992.

- | | |
|-------------|-------------|
| A $r = 6\%$ | B $r = 7\%$ |
| C $r = 3\%$ | D $r = 5\%$ |
| | |

4

What is the value of the rate given this scenario?

A rabbit population starts at 800. Each subsequent yearly breeding season it grows by a certain percent. After 2 years it has increased to a population of 848 rabbits.

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

5

What is the value of the rate given this scenario?

A credit card starts with \$400 of debt. Each subsequent quarter it grows by a certain percent interest. After 2 quarters the debt has grown to \$449.

- | | |
|-------------|--------------|
| A $r = 7\%$ | B $r = 4\%$ |
| C $r = 6\%$ | D $r = 10\%$ |
| | |

6

What is the value of the rate given this scenario?

A credit card starts with \$200 of debt. Each subsequent month it grows by a certain percent interest. After 3 months the debt has grown to \$245.

- | | |
|-------------|-------------|
| A $r = 7\%$ | B $r = 2\%$ |
| C $r = 5\%$ | D $r = 9\%$ |
| | |

7

What is the value of the rate given this scenario?

A credit card starts with \$500 of debt. Each subsequent quarter it grows by a certain percent interest. After 8 quarters the debt has grown to \$796.

- | | |
|-------------|--------------|
| A $r = 7\%$ | B $r = 6\%$ |
| C $r = 1\%$ | D $r = 11\%$ |
| | |

8

What is the value of the rate given this scenario?

A savings account starts with \$300. Each subsequent quarter it earns a certain percent interest. After 6 quarters it has \$402.

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|--------------|-------------|
| A $r = 10\%$ | B $r = 3\%$ |
| C $r = 5\%$ | D $r = 1\%$ |
| | |