



Calculate compound interest

1

What is the simple interest in this situation?

Principle = \$600

Rate = 10%

Time = 1yrs

Interest = \$?

A 66

B 60

C 54

D 108

E 24

F 12

2

\$100 principle grows by 30% interest

A \$117.00

B \$130.00

C \$84.50

D \$65.00

E \$143.00

F \$149.50

3

What is the rate in this simple interest situation?

Principle = \$500

Interest = \$450

Time = 3yrs

Rate = ?%

A 3

B 9

C 30

D 39

E 21

F 57

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What is the rate in this equation for a growth in credit card debt with quarterly interest?

$$281 = 200 \cdot (1 + 0.05)^{(7)}$$

A $r = 200\%$ B $r = 281\%$ C $r = 5\%$ **5**

What does this term represent in a model of yearly compounding growth of money in a savings account?

$$P = P_0 \cdot (1 + r)^t$$

$t = ?$

A $t = \text{time}$ B $t = \text{final cash}$ C $t = \text{starting cash}$ **6**

In this model of yearly compounding growth of money in a savings account, which term represents the time?

$$P = P_0 \cdot (1 + r)^t$$

time = ?

A F B t C r **7**

Which scenario describes this equation?

$$5,739 = 3700 \cdot (1 + 0.05)^{(9)}$$

A A savings account starts with \$900. Each subsequent month it earns 5% in interest. After 37 months it has \$5,739.

B A savings account starts with \$3700. Each subsequent month it earns 5% in interest. After 9 months it has \$5,739.

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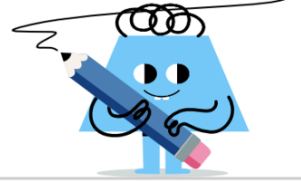
A savings account starts with \$5200. Each subsequent quarter it earns 3% in interest. After 2 quarters it has \$5,516.

A $5,516 = 200 \cdot (1 + 0.03)^{(52)}$

B $5,516 = 5200 \cdot (1 + 0.02)^{(3)}$

C $5,516 = 300 \cdot (1 + 0.52)^{(2)}$

D $5,516 = 5200 \cdot (1 + 0.03)^{(2)}$



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What is the value of the final cash given this model of a monthly compounding growth of money in a savings account?

$$P = 1100 \cdot (1 + 0.02)^{(7)}$$

A	$P = 1,620$
B	$P = 1,263$
C	$P = 860$
D	$P = 1,490$

10

A credit card starts with \$500 of debt. Each subsequent quarter it grows by 3% in interest. After 8 quarters the debt has grown to a certain amount.

A	$D = 700$
B	$D = 633$
C	$D = 460$
D	$D = 665$

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A rabbit population starts at 500. Each subsequent yearly breeding season it grows by 7%. After 6 years it has increased to a certain population.

A	$P = 975$
B	$P = 840$
C	$P = 750$
D	$P = 460$

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A rabbit population starts at 500. Each subsequent yearly breeding season it grows by 6%. After 8 years it has increased to a certain population.

A	$P = 1,110$
B	$P = 1,105$
C	$P = 540$
D	$P = 796$