



## Determine present and future values

**1**

\$60 principle plus 30% interest

A \$66.30

B \$58.50

C \$113.10

D \$81.90

E \$42.90

F \$78.00

**2**

Add 25% interest to \$72 principle

A \$90.00

B \$108.00

C \$121.50

D \$103.50

E \$58.50

F \$117.00

**3**

In this model of quarterly compounding growth of money in a savings account, which term represents the final cash?

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

final cash = ?

A  $r$ B  $P_0$ C  $F$ **4**

Which scenario describes this equation?

$$6,403 = 5800 \cdot (1 + 0.02)^{(5)}$$

A A savings account starts with \$500. Each subsequent quarter it earns 2% in interest. After 58 quarters it has \$6,403.

B A savings account starts with \$5800. Each subsequent quarter it earns 2% in interest. After 5 quarters it has \$6,403.

**5**

A savings account starts with \$4700. Each subsequent month it earns 6% in interest. After 9 months it has \$7,940.

A  $7,940 = 4700 \cdot (1 + 0.06)^{(9)}$

B  $7,940 = 900 \cdot (1 + 0.06)^{(47)}$

C  $7,940 = 600 \cdot (1 + 0.47)^{(9)}$

**6**

What is the rate in this equation for a monthly compounding growth of money in a savings account?

$$1,144 = 1000 \cdot (1 + 0.07)^{(2)}$$

A  $r = 5\%$ B  $r = 4\%$ C  $r = 8\%$ D  $r = 7\%$ **7**

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

$$P = 2800 \cdot (1 + 0.02)^{(5)}$$

A  $P = 1,980$ B  $P = 3,091$ C  $P = 3,620$ D  $P = 3,410$

**Determine present and future values****8**

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

$$8,187 = P_0 \cdot (1 + 0.09)^{(4)}$$

A

$$P_0 = 5900$$

B

$$P_0 = 5500$$

C

$$P_0 = 6100$$

D

$$P_0 = 5800$$

**9**

A savings account starts with \$2600. Each subsequent year it earns 2% in interest. After 3 years it has a certain amount of cash.

A

$$P = 2,759$$

B

$$P = 3,460$$

C

$$P = 3,320$$

D

$$P = 2,560$$

**10**

A savings account starts with a certain amount of cash. Each subsequent month it earns 4% in interest. After 3 months it has \$3,262.

A

$$P_0 = 3000$$

B

$$P_0 = 3200$$

C

$$P_0 = 2900$$

D

$$P_0 = 2800$$

**11**

A savings account starts with \$400. Each subsequent month it earns 9% in interest. After 7 months it has a certain amount of cash.

A

$$P = 1,075$$

B

$$P = 731$$

C

$$P = 1,040$$

D

$$P = 920$$

**12**

A savings account starts with \$5000. Each subsequent year it earns 6% in interest. After 9 years it has a certain amount of cash.

A

$$P = 12,470$$

B

$$P = 8,720$$

C

$$P = 11,070$$

D

$$P = 8,447$$