

## A.2

1.

Victor bought a computer for \$1,800. He made a down payment of \$200 and will pay the rest in 5 equal payments. If  $p$  represents the amount of each payment, which equation can be used to find this amount?

- F  $\$200p = \$1,800$   
G  $\$1,800 + 5p = \$200$   
H  $\$1,800 + \$200 = 5p$   
J  $\$1,800 = 5p + \$200$

2.

What is the value of  $x(5 + y)$  if  $x = 4$  and  $y = 2$ ?

- A 18  
B 22  
C 28  
D 36

3.

What is the value of  $a(b - c)$  if  $a = 2$ ,  $b = -3$  and  $c = -2$ ?

- A 2  
B -2  
C -4  
D -10

4.

Each week Jessica earns a 2% bonus on any sales she makes over \$600. She also receives a fixed salary of \$190 per week. If Jessica sold \$1,300 worth of merchandise in a week, which equation could be used to determine her total earnings,  $t$ , for the week?

- F  $t = (0.02)[1.90 + (1,300 - 600)]$   
G  $t = 190 + (0.02)(600)$   
H  $t = (190 + 600)(0.02)$   
J  $t = 190 + (0.02)(1,300 - 600)$

5.

Which expression correctly describes  $x$  divided by the sum of  $y$  and 7?

- A  $x \div y + 7$   
B  $\frac{x}{y + 7}$   
C  $\frac{x}{y} + 7$   
D  $\frac{y + 7}{x}$

6.

What is the value of  $3x^2 - y^2$  if  $x = -1$  and  $y = 3$ ?

- A 12  
B -3  
C -6  
D -12

7.

Which expression correctly represents \$10 less than twice the cost,  $c$ ?

- F  $10 - 2c$   
G  $10 - 2 + c$   
H  $2c - 10$   
J  $\frac{c}{2} - 10$

8.

A consulting engineer bills his customers \$90 for each hour he works. If a client's bill is \$955, which equation could be used to find the number of hours worked?

- F  $\frac{90}{x} = 955$   
G  $\frac{x}{955} = 90$   
H  $90x = 955$   
J  $955x = 90$