Systems of equations
C. Math / M12

9

$$3x + 4y = -23$$
$$2y - x = -19$$

What is the solution (x, y) to the system of equations above?

A) $(-5, -2)$

B) $(3, -8)$

C) $(4, -6)$

D) $(9, -6)$

11

$$b = 2.35 + 0.25x$$

$$c = 1.75 + 0.40x$$

In the equations above, b and c represent the price per pound, in dollars, of beef and chicken, respectively, x weeks after July 1 during last summer. What was the price per pound of beef when it was equal to the price per pound of chicken?

A) $2.60

B) $2.85

C) $2.95

D) $3.35

18

$$x + y = -9$$
$$x + 2y = -25$$

According to the system of equations above, what is the value of x ?

8. Uptown Cable, a cable TV provider, charges each customer $120 for installation, plus $25 per month for cable programming. Uptown's competitor, Downtown Cable, charges each customer $60 for installation, plus $35 per month for cable programming. A customer who signs up with Uptown will pay the same total amount for cable TV as a customer who signs up with Downtown if each pays for installation and cable programming for how many months?

F.   3
G.   6
H.   10
J.   18
K.   30

57. When graphed in the standard (x,y) coordinate plane, the lines $x = -3$ and $y = x - 3$ intersect at what point?

A. $(0, 0)$
B. $(0, -3)$
C. $(-3, 0)$
D. $(-3, -3)$
E. $(-3, -6)$