Math 084 W2010 Quiz 7 Preparation Sections 5.1 5.2 v02
Dressler

Name_____

Decide whether or not the ordered pair is a solution of the system.

1) (–5, –5)
$x + y = 0$
$x - y = 10$

2) (3, –2)
$x + y = -5$
$x - y = -1$

3) (–5, 1)
$4x = 21 - y$
$2x = 14 - 4y$

4) (–1, –5)
$4x = -9 - y$
$3x = -23 - 4y$

5) (–2, 5)
$3x + y = -11$
$4x + 3y = -23$

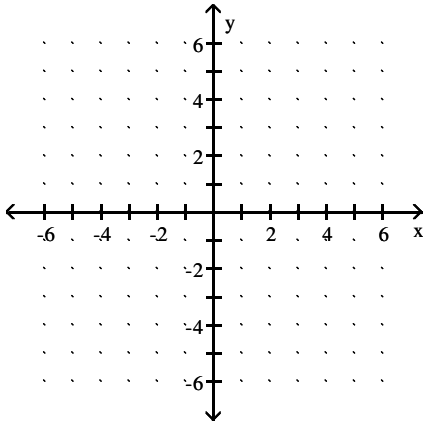
6) (3, 2)
$3x = -7 - y$
$2x = 0 - 3y$

7) (2, –5)
$2x = -1 - y$
$4x = -2 - 2y$

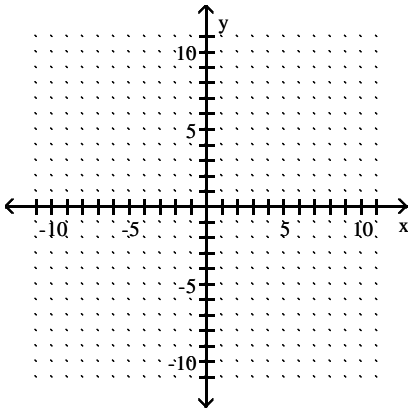
8) (–2, 3)
$2x + y = -7$
$4x + 2y = -14$

Solve the system by graphing.

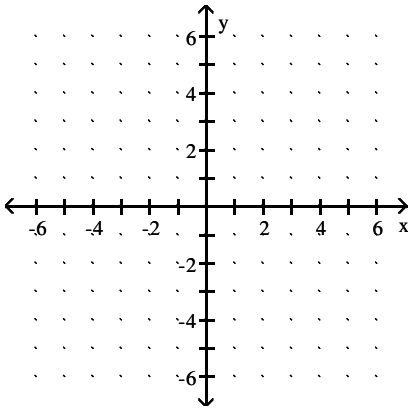
9) $3x + y = -4$
$2x + 3y = 2$



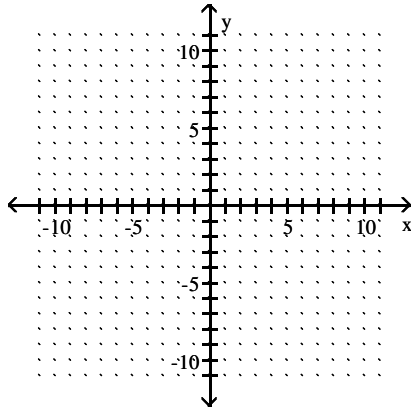
10) $x + y = 4$
$x - y = -2$



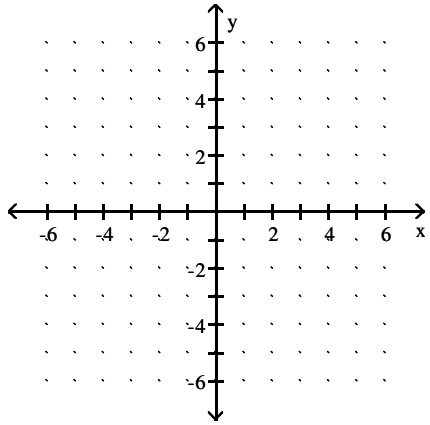
11) $\frac{1}{4}x - y = 1$
$x = 4$



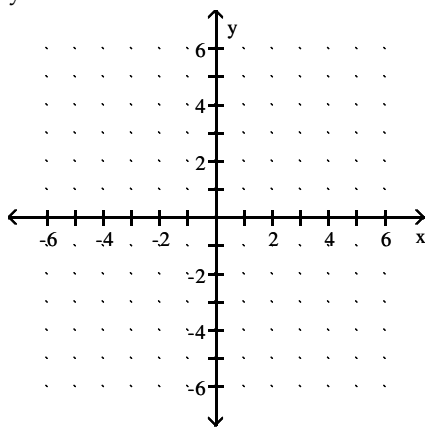
12) $2x + y = 6$
$3x + y = 7$



13) $x = 6$
$y = -5$

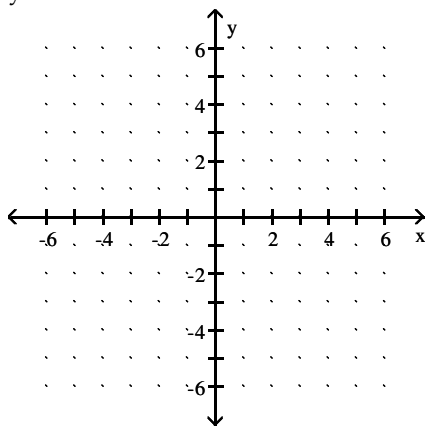


14) $x = 4$
$y = -3$

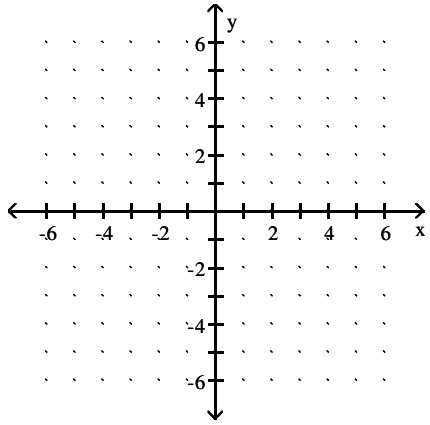


Solve the system by graphing. If there is no solution or an infinite number of solutions, so state.

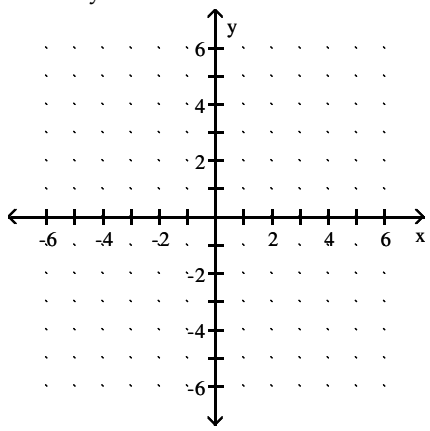
15) $x = -y$
$y + x = 6$



16) $2x + y = 6$
$2x + y = 5$



17) $4x + y = 15$
$12x + 3y = 45$



Solve the system by the substitution method. If there is no solution or an infinite number of solutions, so state.

18) $x + y = -5$
$y = 4x$

19) $x + y = -6$
$y = -4x$

20) $4x + 7y = -49$
$-2x - 3y = 21$

21) $\frac{1}{3}x + \frac{1}{3}y = 0$
$x - y = 6$

22) $y = 1.2x - 4.5$
$y = 0.8x - 2.78$

23) $2x + y = 8$
$4x + 2y = 16$

24) $x + y = -6$
$x - y = 11$

25) $7x + 7y = -7$
$-2x + 5y = -5$

26) $\frac{1}{2}x + \frac{1}{2}y = 2$
$x - y = -2$

27) $\frac{1}{2}x + \frac{1}{2}y = -1$
$x - y = -10$

28) $y = 1.2x + 4.3$
$y = 0.7x - 0.35$

29) $y = 1.3x - 4.4$
$y = 0.7x - 0.08$

30) $3x + y = 12$
$12x + 4y = 48$

31) $x + y = -3$
$x - y = 18$

Solve the problem.

32) One number is 2 less than a second number. Twice the second number is 8 less than 4 times the first. Find the two numbers.

33) One number is 4 less than a second number. Twice the second number is 22 less than 5 times the first. Find the two numbers.

34) One number is 4 less than a second number. Twice the second number is 19 less than 5 times the first. Find the two numbers.

35) One number is 5 less than a second number. Twice the second number is 25 more than 3 times the first. Find the two numbers.

36) One number is 10 less than a second number. Twice the second number is 46 more than 4 times the first. Find the two numbers.

37) A vendor sells hot dogs and bags of potato chips. A customer buys 2 hot dogs and 4 bags of potato chips for $6.50. Another customer buys 5 hot dogs and 3 bags of potato chips for $9.25. Find the cost of each item.

38) A vendor sells hot dogs and bags of potato chips. A customer buys 5 hot dogs and 3 bags of potato chips for $14.25. Another customer buys 4 hot dogs and 5 bags of potato chips for $14.00. Find the cost of each item.

39) A tour group split into two groups when waiting in line for food at a fast food counter. The first group bought 8 slices of pizza and 5 soft drinks for $36.47. The second group bought 5 slices of pizza and 4 soft drinks for $ 24.08. How much does one slice of pizza cost?

40) A tour group split into two groups when waiting in line for food at a fast food counter. The first group bought 7 slices of pizza and 6 soft drinks for $30.08. The second group bought 5 slices of pizza and 4 soft drinks for $ 21.10. How much does one slice of pizza cost?

1) No
2) No
3) No
4) Yes
5) No
6) No
7) Yes
8) No
9) {(−2, 2)}
10) {(1, 3)}
11) {(4, 0)}
12) {(1, 4)}
13) {(6, −5)}
14) {(4, −3)}
15) no solution; ∅
16) no solution; ∅
17) infinite number of solutions; {(x, y)| 4x + y = 15} or {(x, y)| 12x + 3y = 45}
18) {(−1, −4)}
19) {(2, −8)}
20) {(0, −7)}
21) {(3, −3)}
22) {(4.3, 0.66)}
23) infinite number of solutions; {(x, y)| 2x + y = 8} or {(x, y)| 4x + 2y = 16}
24) $\left\{\left(\frac{5}{2}, -\frac{17}{2}\right)\right\}$
25) {(0, −1)}
26) {(1, 3)}
27) {(−6, 4)}
28) {(−9.3, −6.86)}
29) {(7.2, 4.96)}
30) infinite number of solutions; {(x, y)| 3x + y = 12} or {(x, y)| 12x + 4y = 48}
31) $\left\{\left(\frac{15}{2}, -\frac{21}{2}\right)\right\}$
32) 6 and 8
33) 10 and 14
34) 9 and 13
35) −15 and −10
36) −13 and −3
37) $1.25 for a hot dog; $1.00 for a bag of potato chips
38) $2.25 for a hot dog; $1.00 for a bag of potato chips
39) $3.64 per slice of pizza
40) $3.14 per slice of pizza