Name _____   Pre-Algebra

Chapter 8 & 9 Practice Test

Solve. Show your work for each problem.

1. $2x + 3 = 19$ 4. $8b = 42 + 2b$

2. $4(m - 7) = 36$ 5. $2(5a + 1) + 6a + 5 = 39$

3. $\dfrac{w}{3} + 11 = 27$

Write an equation, then solve it.

6.   Twice a number decreased by 3 is 15.

7.   Five more than a number divided by 3 is 21.

8.   Jason earned $340 on Friday. On Saturday, he earned $10 more than twice what he earned on Friday.
        a.   How much did Jason earn on Saturday?

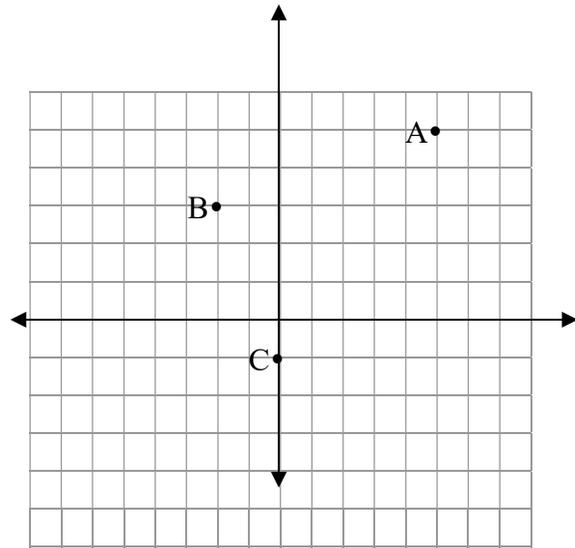   b.   How much did he earn in total on both days?

Solve.

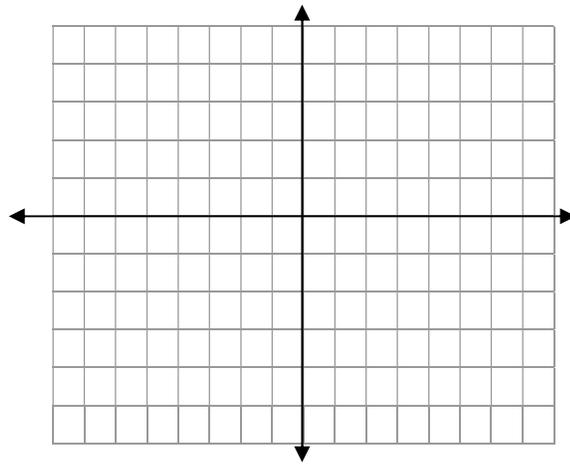9. $k - 15 \; < 19$

10. $-6x > 150$

11. $4(m - 1) > 24$

List the coordinates of each point.
Each square equals 1 unit.

12.   A

13.   B

14.   C

Graph and label each point.

15.   (4, -2)

16.   (-3, 5)

17.   (-6, -1)

18.   Which pair is a solution for the equation $y = 2x + 7$?
      (4, 13)   or   (-2, 3)

19.   Make a table of solutions for $y = -x + 3$.
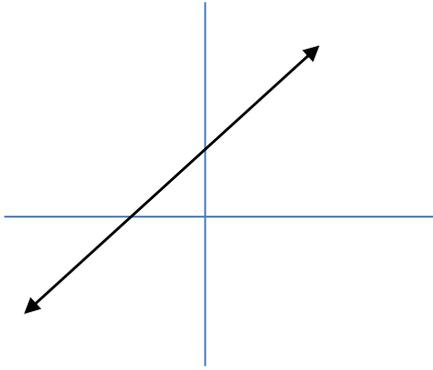
x	y
-2	
-1	
0	
1	
2	

Find the slope between the points. $slope = \dfrac{y_2 - y_1}{x_2 - x_1}$

20.   (2, 5) and (1, 1)

21.   (-3, 2) and (1, 6)

22.   Is this a direct variation?

Direct Variation: $y = kx$

23.   Find k when x = 4 and y = 20.

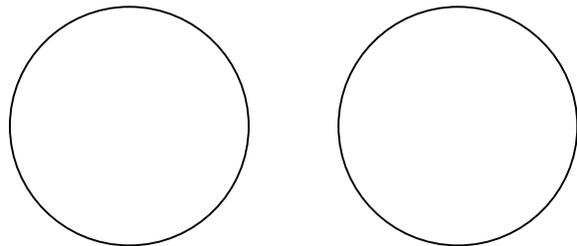24.   If y = 15 when x = 10, find y when x = 32.

25. List the domain and range of this relation.
    (-4, 5) (2, -3) (1, 5)

Domain:

Range:

26. Is the relation in Problem 25 a function?

27. Create a circle map the following order
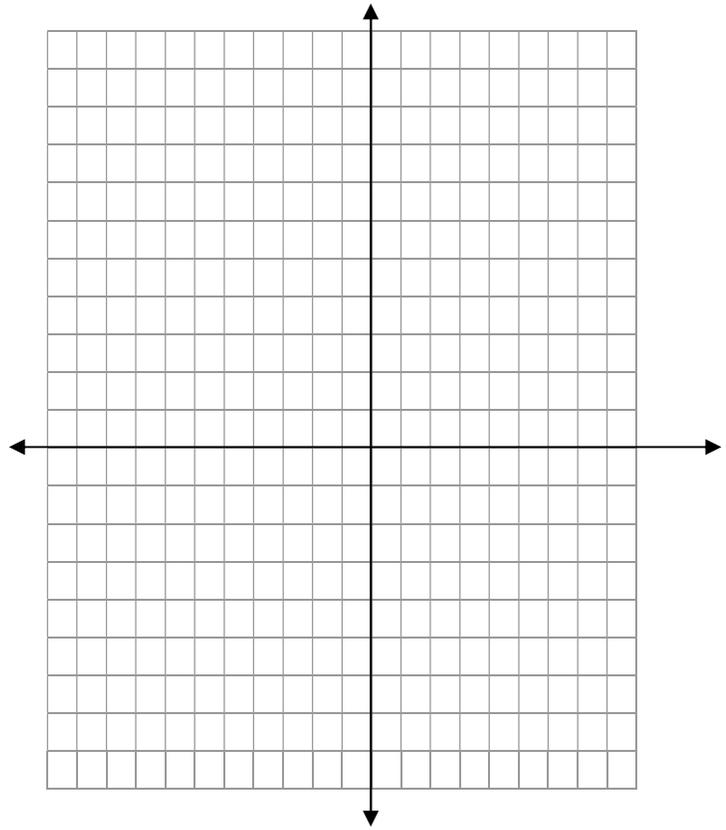   pairs: (3, 4) (-2, 1) (1, -1) (3, -1)

28. Is the relation in Problem 27 a function?

Graph the lines.

29. $y = 3/4x + 2$

30. $y = 2x - 4$

31. $y = -2/3x + 6$

32. Circle the graphs that represent functions.