Chapter 5 & 6 Test Practice

For Questions 1 – 3, use the table of values on the right.

x	y
7	4
2	1
-2	8
3	4

1. Is the relation a function?

2. What is the domain of the relation?

3. What is the range of the relation?

Draw a picture of a relation that:

4. Is a function.

5. Is not a function.

Graph the lines.

6. $y = {}^{2}/_{3}x - 4$
7. $3x - 2y = 6$
8. $y = 1$
9. $x = 8$

Write the equation of the lines.

10. Slope = ¾, y-intercept = 17
11. Slope = 4, goes through the point (5, 8)
12. Goes through the points (7, -2) and (1, 4).
13. Horizontal line though the point (-10, 11)
14. Vertical line through the point (34, -54)
15. Parallel to $y = \frac{1}{2}x - 7$ and through the point (8, 3)
16. Perpendicular to $y = \frac{3}{4}x + 2$ and through the point (15, -4)

Find the x and y intercepts of the lines.

17. $2x + 4y = 16$

18. $y = 3x - 6$

19. The slope of a horizontal line is _____.

20. The slope of a vertical line is _____.

21. x and y vary directly. When x = 12, then y = 4. Find the value of y when x = 21.

Graph the inequalities.

22. $y \geq {}^{1}/_{4}x - 2$

23. $y < 3x + 1$

Describe the translation of the function $y = |x|$.

24. $y = |x - 5| - 3$
25. $y = |x + 2| + 8$

Write the function for the translation of $y = |x|$. Right 11, Down 6.