Algebra 2 – Chapter 2 Recovery

1. Find the domain of the relation {(3, -2), (3, 4), (2, 3)}. Then determine whether the relation is a function.

2. Find f(-2) if f(x) = 2x – 3.

3. Write three different examples of a linear function.

4. Write $4y = 2x - 6$ in standard form.

5. What is the slope of a line that passes through the points (4,-5) and (-2, 6)?

6. What is the slope of a line that is parallel to $y = -\frac{3}{2}x + 4$?

7. What is the slope of the line with equation 4x + 5y = 20?

8. What is the slope of the line $y = -2x + 5$?

9. What is the y-intercept of the line 4x+7y=28

10. What is the transformation of the graph $f(x) = |x - 2| - 6$?

11. What is the name of the function y=5?

12. Identify the vertex of $y = 3|x + 5|$.

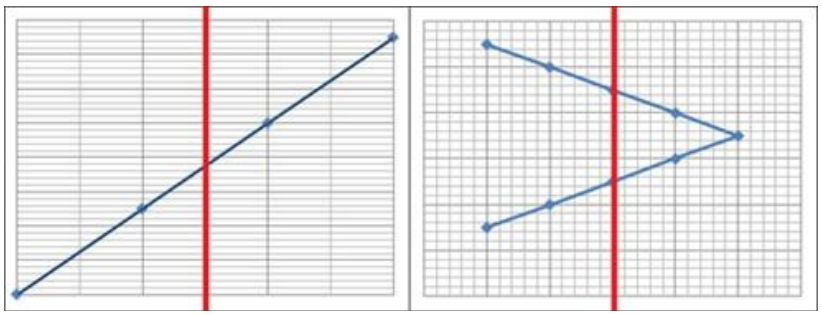
13. What is the slope of the inequality $y > -3x + 4$?

14. The graph of the linear inequality $y \geq 7x - 5$ is the shaded region _____ the graph.

15. What is the vertex of the graph $f(x) = 5|x + 5| - 2$?

On problems 16 and 17, use the pictures to answer each question.

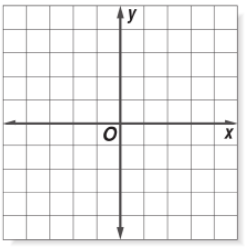
16. 17.



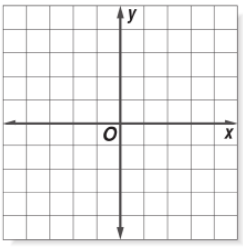
Is the graph above a function? Is the graph above a function?

Graph each equation or inequality accurately.

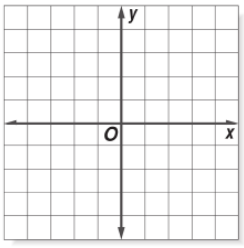
18. $y = |x| - 2$



19. $y \geq 2x + 3$



20. $5x - 3y = 15$



21. Write an equation in slope intercept form parallel to the line through y = 2x-4, but going through the point (2, -1).

22. Write an equation in point-slope form of a line that contains the points (-1, 5) and (-2, 0).

23. Write an equation in slope-intercept form of slope of $\frac{3}{2}$ and contains the point (2, -3). (Hint write in point-slope FIRST)

24. Find the slope of a line that contains the points (-2, 3) and (4, 2).

25. Write an equation in point slope-form of a line perpendicular to the line with equation $y = -2x + 5$ and contains the point (-3, 2).