Name_____ Geometry 6-7 Slope of Lines Review

I. Vertical lines: *m* = _____

II. Horizontal lines: *m* = _____

III: Lines with positive slope _____

IV: Lines with negative slope _____

V. Parallel lines have _____ slopes.

VI. Perpendicular lines have _____ slopes.

Determine if the following lines are parallel, perpendicular or neither.

1. $\overline{AB}: m = \frac{2}{3}$ $\overline{CD}: m = \frac{2}{3}$

2. $\overline{AB}: m = 6$ $\overline{CD}: m = -\frac{1}{6}$

3. $\overline{AB}: m = \frac{2}{3}$ $\overline{CD}: m = \frac{3}{2}$

4. $\overline{AB}: m = \text{undefined}$ $\overline{CD}: m = 0$

5. $\overline{AB}: m = 1$ $\overline{CD}: m = -1$

6. $\overline{AB}: m = \frac{5}{3}$ $\overline{CD}: m = -\frac{3}{5}$

7. $\overline{AB}: m = 7$ $\overline{CD}: m = 7$

8. $\overline{AB}: m = 0$ $\overline{CD}: m = \text{undefined}$

9. $\overline{AB}: m = -\frac{6}{7}$ $\overline{CD}: m = \frac{6}{7}$

10. $\overline{AB}: m = 2$ $\overline{CD}: m = -2$

11. $\overline{AB}: m = \frac{5}{2}$ $\overline{CD}: m = \frac{5}{2}$

12. $\overline{AB}: m = \frac{1}{2}$ $\overline{CD}: m = -2$

13. $\overline{AB}: m = 4$ $\overline{CD}: m = \frac{1}{4}$

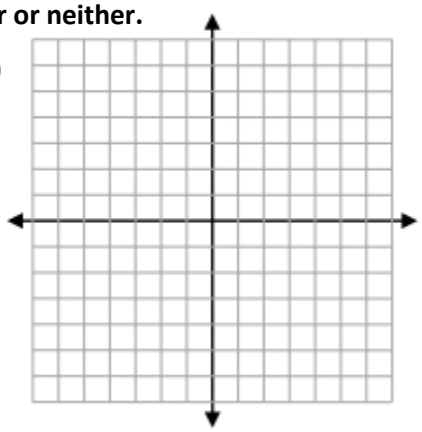
14. $\overline{AB}: m = -\frac{8}{9}$ $\overline{CD}: m = -\frac{8}{9}$

15. $\overline{AB}: m = undefined$ $\overline{CD}: m = 0$

Plot each set of points and find the slope of each line segment by using $m = \frac{rise}{run}$. Determine if the line segments are parallel, perpendicular or neither.

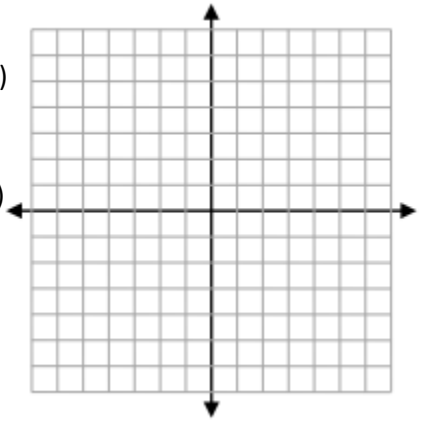
16. a. (-4, 6) and (-1, 6)

b. (-4 -5) and (-4, 6)



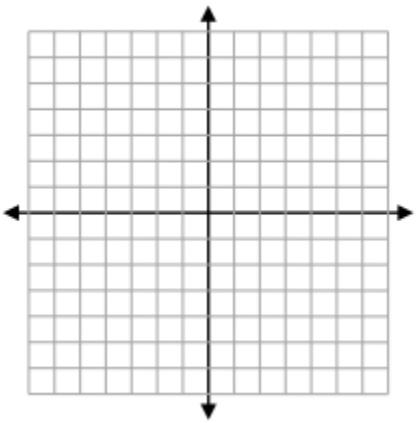
17. a. (0, 1) and (4, 3)

b. (0, 3) and (4, 1)



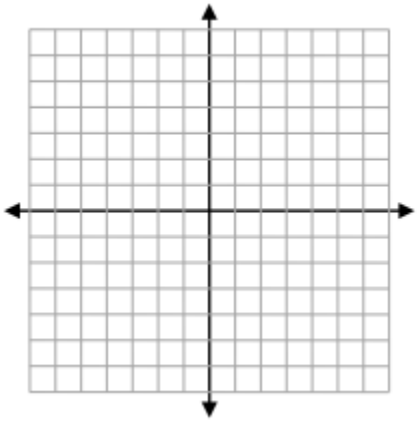
18. a. (-5, 1) and (-2, 5)

b. (-6, 5) and (-2, 2)



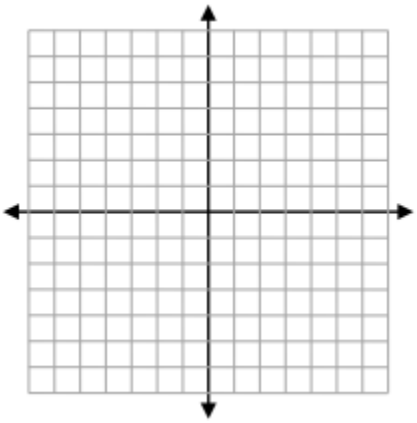
19. a. (0, -2) and (3, -1)

b. (0, 4) and (3, 5)



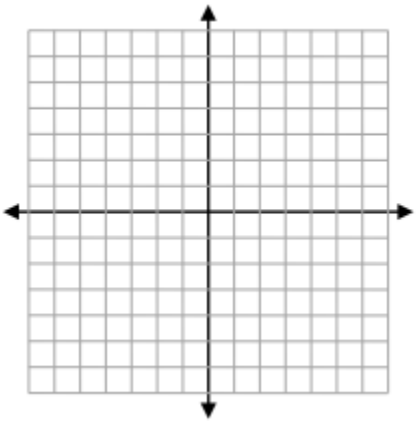
20. a. (0, 2) and (4, 3)

b. (4, 3) and (5, -1)



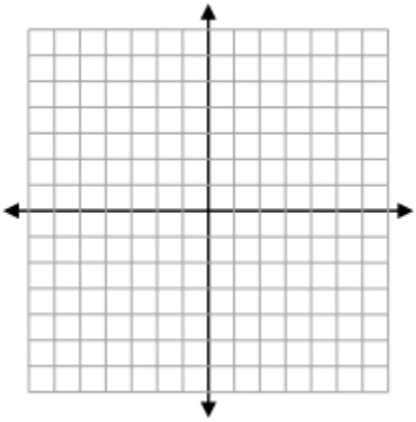
21. a. (0, -2) and (1, 4)

b. (-4, 6) and (-5, 0)



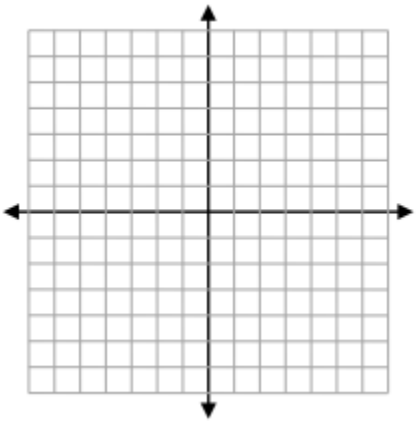
22. a. (-5, -5) and (-2, 0)

b. (-5, 0) and (-2, -5)



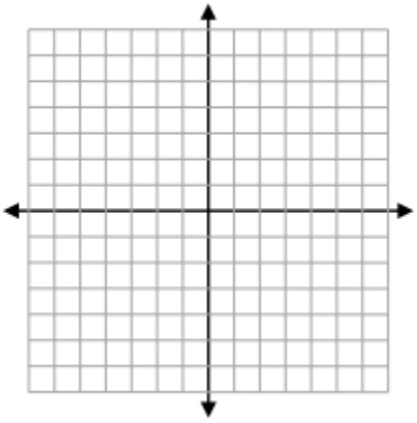
23. a. (-3, 4) and (1, 4)

b. (-3, 4) and (-3,-4)



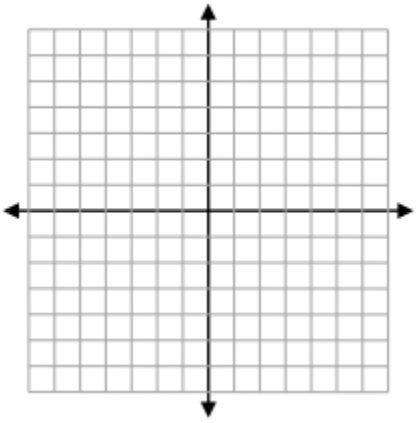
24. a. (-2, 3) and (2, 2)

b. (-2, 3) and (-1, 7)



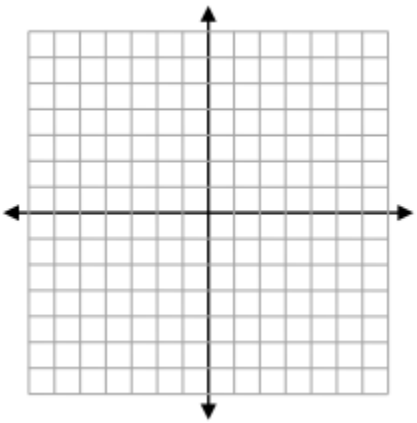
25. a. (3, 2) and (6, 4)

b. (4, 4) and (6, 1)



26. a. (1, -7) and (3, -2)

b. (4, -6) and (6, -1)



27. a. (-5, 0) and (-3, -2)

b. (-5, -5) and ((-3, -2)