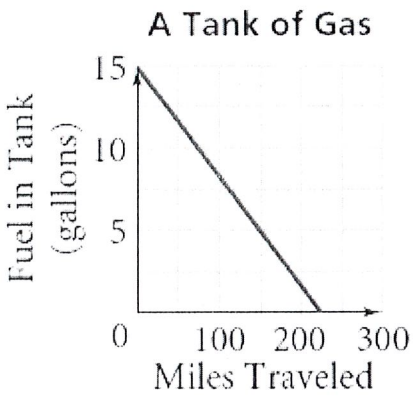
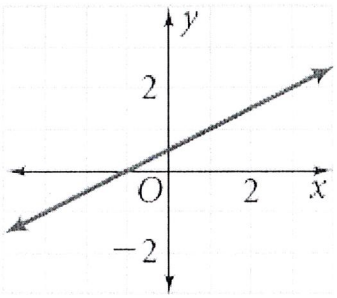
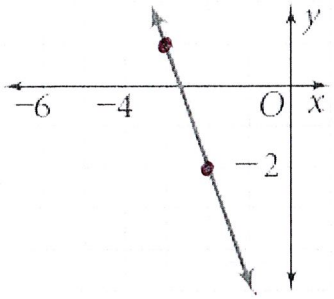
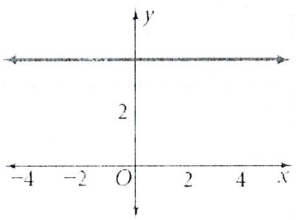
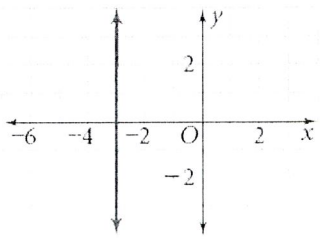
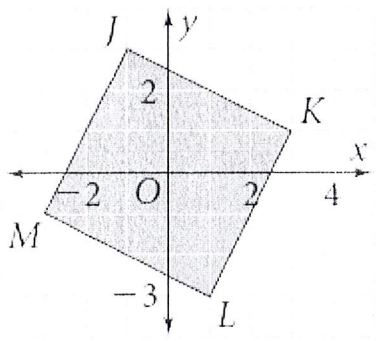
Name _____

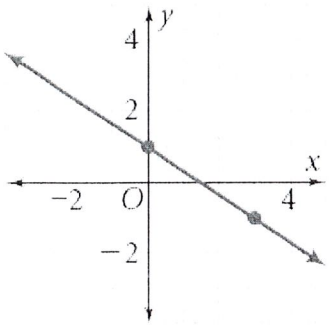
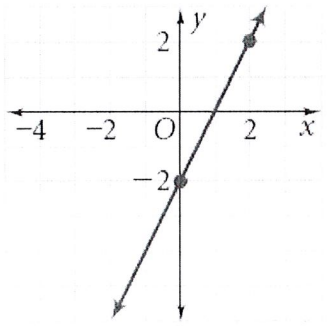
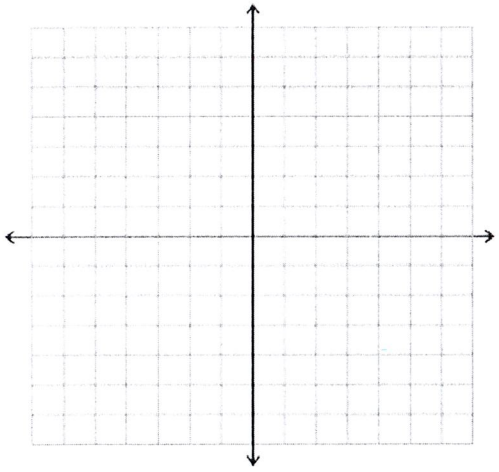
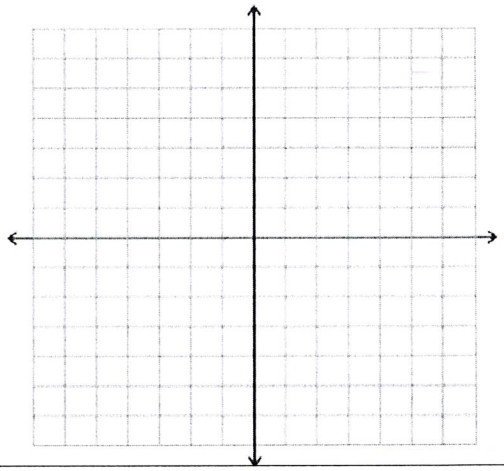
Bookwork 6.1 pages 286-289

3. Find the rate of change, explain what it means. 3.  	7. Find the slope of the line 7. 
8. Find the slope of the line 8.  	Find the slope: 15. (-3, 1) (3, -5)
18. Find the slope of the line: (-4, -5) (-9, 1)	21. find the slope of the line: (0, -1) (1, -6)
Find the slope: 22.  	Find the slope: 23. 

pg 286-289

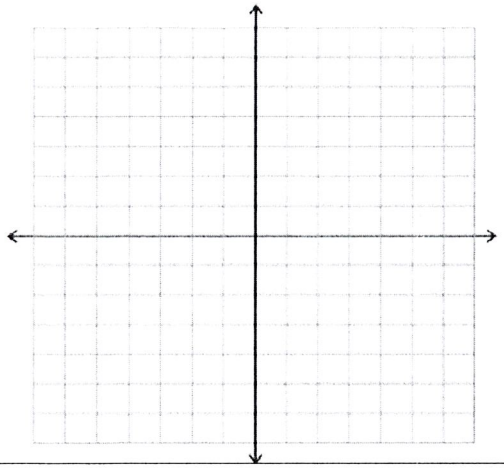
Find the rate of change: 28. The cost of group museum tickets is $48 for 4 people and $78 for ten people.	Find the slope of the line: 25. (4, 3) (4, -3)
26. Find the slope of the line: (-5, $\frac{1}{2}$) (-5, 3)	Find the slope of the line: **31.** $\left(4, 1\frac{2}{3}\right), \left(-2, \frac{2}{3}\right)$
Find the slopes of the sides: 45. 	Find x or y: **51.** $(x, 3), (2, 8)$; slope $= -\frac{5}{2}$
Find the slope: **63.** $(a, -b), (-a, -b)$	Find the slope: **65.** $(2a, b), (c, 2d)$
Do the points lie on the same line? Explain. **66.** $A(1, 3), B(4, 2), C(-2, 4)$	72. A line has slope $\frac{4}{3}$. Through which two points could this line pass? A. (24, 19), (8, 10) B. (10, 8), (16, 0) C. (28, 10), (22, 2) D. (4, 20), (0, 17)

6.2 pages 294-297

State the slope and y-intercept: 3. $y = x - \frac{5}{4}$	Write the equation of the line: 18. $m = -7, b = \frac{1}{3}$
Write an equation in slope intercept form 22. 	Write an equation in slope intercept form 24. 
Graph: 34. $Y = 4x - 3$ 	Graph: 37. $Y = -\frac{2}{3}x + 2$ 
Find the slope and y-intercept 46. $-2y = 6(5 - 3x)$	Find the slope and y-intercept 45. $2y - 6 = 3x$

pg 294-297

33. graph: $y = -x + 2$

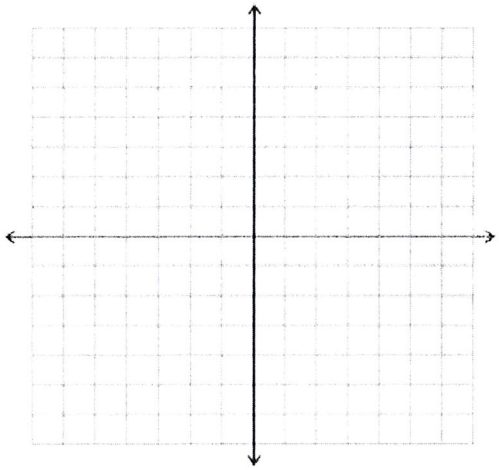


Find the slope and y-intercept

47. $y - d = cx$

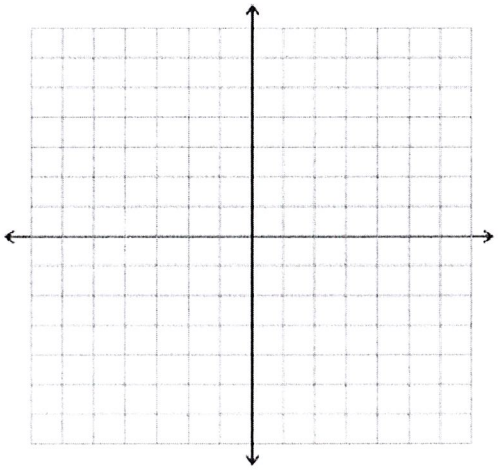
Find the slope and y-intercept then graph

51. $2y + 4x = 0$



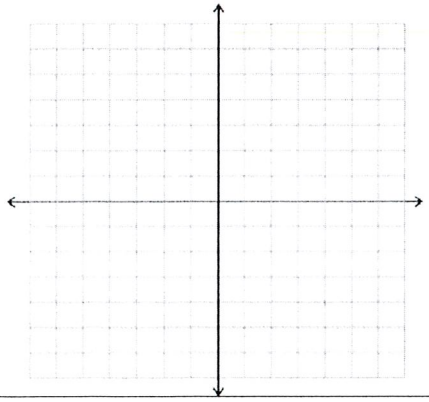
Find the slope and y-intercept then graph

52. $3y + 6 = -2x$



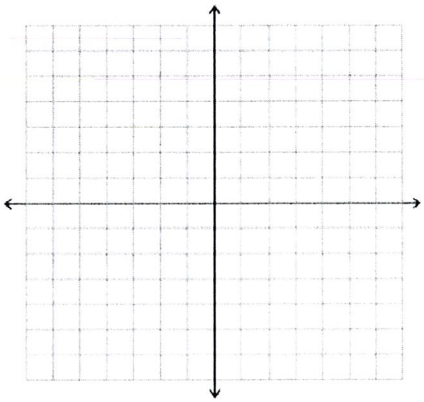
Find the slope and y-intercept and graph:

53. $y + 2 = 5x - 4$

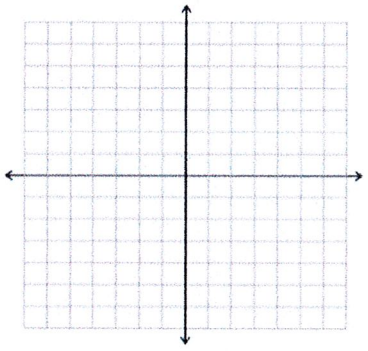
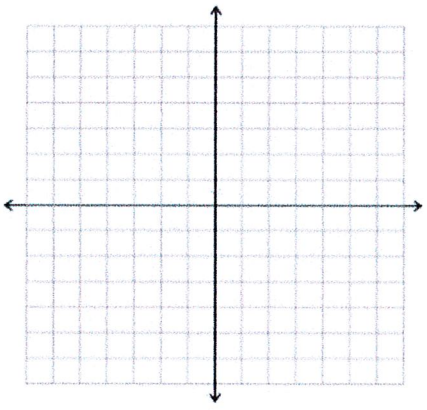
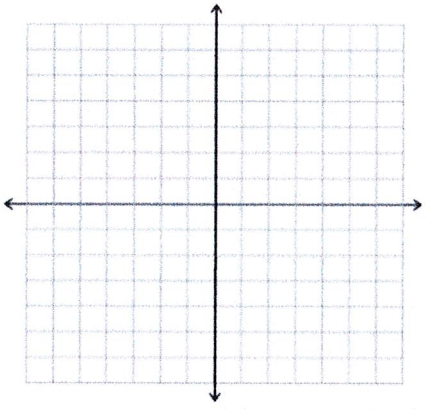
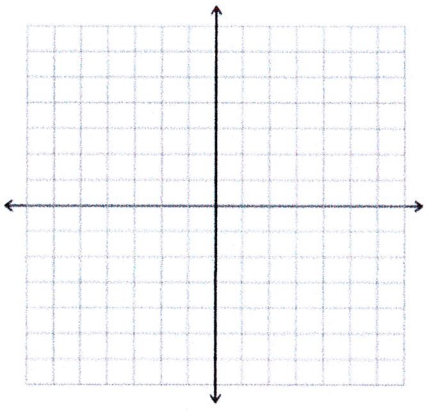


Find the slope and y-intercept and graph:

54. $4x + 3y = 2x - 1$

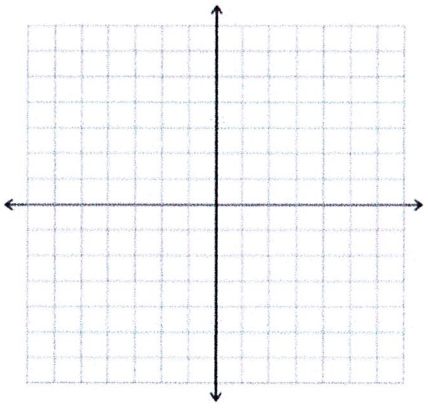


Pgs 301-303

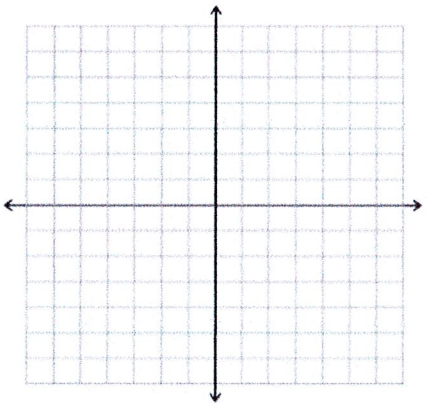
1. Find the x and y intercepts: $x + 2y = 18$	4. Find the x and y intercepts: $-6x + 3y = -9$
8. Find the x and y intercepts: $7x - 2y = 4$	9. Find the x and y intercepts: $-8x + 10y = 40$
14. graph using x and y intercepts $x + y = -5$ 	15. graph using x and y intercepts $x - y = -7$ 
16. graph using x and y intercepts $-3x + y = 6$ 	18. graph using x and y intercepts $5x - 3y = 15$ 

Pgs 301 - 303

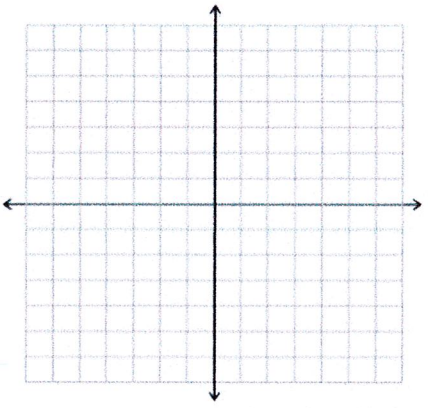
23. graph the line $y = 3$



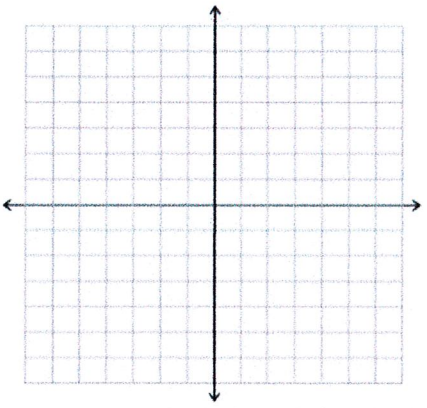
24. graph the line $x = -7$



25. graph the line $y = -1.5$



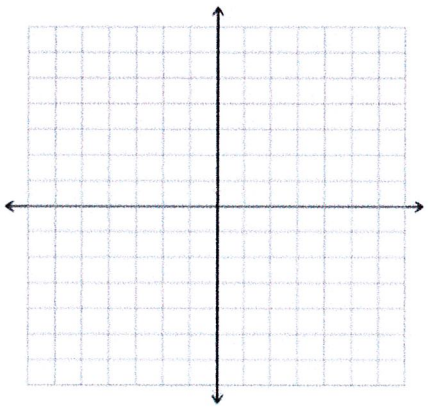
26. graph the line $x = 4.5$



27. write in standard form using integers:
$y = 3x + 1$

29. write in standard form using integers:
$y = \frac{1}{2}x - 3$

pgs 301-303

31. write in standard form using integers: $y = -\frac{3}{4}x - 4$	33. write in standard form using integers: $y = \frac{7}{2}x + \frac{1}{4}$
34. write in standard form using integers: $y = -\frac{2}{5}x + \frac{1}{10}$	37. Larry runs at an average rate of 8 mi/h. He walks at an average rate of 3 mi/h. a. define a variable for time spent walking. Define a variable for time spend running. b. Write an equation in standard form to relate the times he could spend running and walking if he travels a distance of 15 miles.
45. graph: $9 + y = 8 - x$ 	67. What is the slope of $Ax + By = C$?

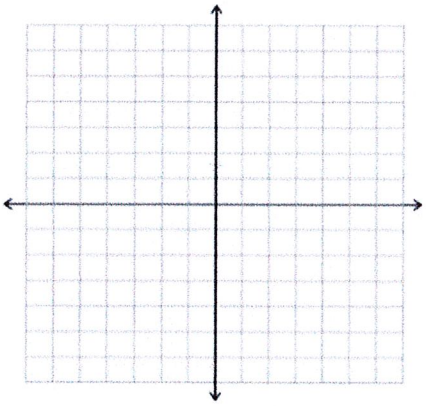
Pgs 307-309

For #1-9, identify the point and slope then graph

1. $y - 2 = (x - 3)$

point _____

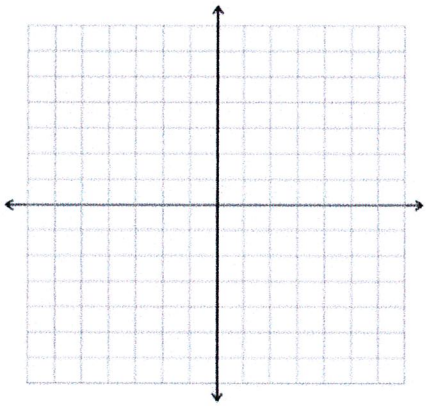
slope_____



$y - 2 = -\frac{3}{2}(x - 3)$

point _____

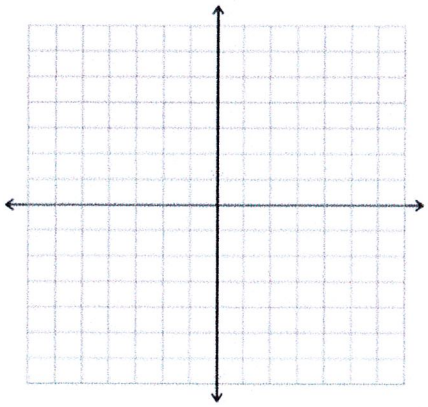
slope_____



$y + 1 = \frac{2}{3}(x + 4)$

point _____

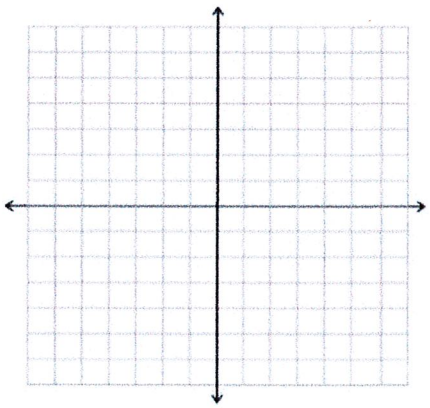
slope_____



$y + 3 = -2(x - 1)$

point _____

slope_____

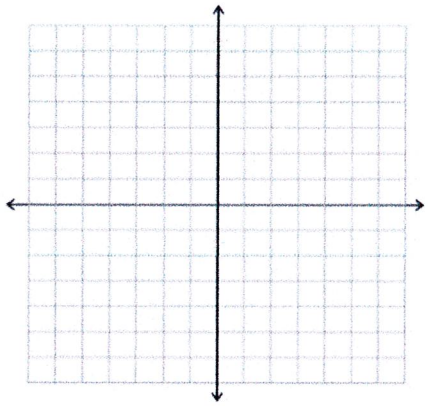


pgs 307-309

$y - 2 = 3(x + 2)$

point _____

slope_____



For #10-18 write an equation in point slope form

10. (3, -4) m = 6

13. (-2, -7) $m = -\frac{3}{2}$

18. (-6, 1) $m = \frac{2}{3}$

For #19-30, A. write an equation in point slope form; B. write the equation in slope intercept form

22. (6, -4) (-3, 5)

23. (-1, -5) (-7, -6)

24. (-3, -4) (3, -2)

25. (2, 7) (1, -4)

pgs 307-309

31. is the data in the table linear? If so, write an equation in point slope and slope intercept form.

x	y
-4	9
2	-3
5	-9
9	-17

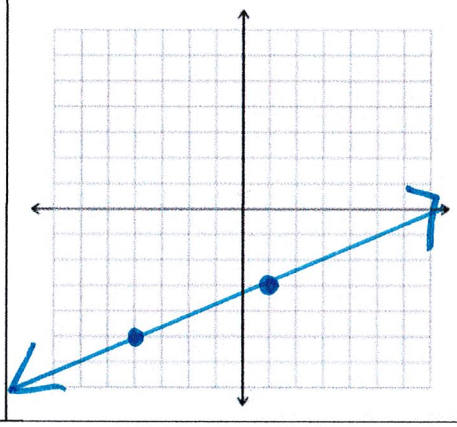
32. is the data in the table linear? If so, write an equation in point slope and slope intercept form.

x	y
-10	-5
2-2	19
5	40
11	58

33. is the data in the table linear? If so, write an equation in point slope and slope intercept form.

Speed posted over speed limit	Fine $
10	75
12	95
15	125
19	165

37. write an equation in point slope form



For #39-53, write an equation in A. point slope form, B. standard form using integers

39. (1, 4) (-1, 1)

40. (6, -3) (-2, -3)

pgs 307-309

45. (5, -3) (3, 4)	50. (5, 3) (4, 5)
62. Write an equation in slope intercept form: The line contains the point (1, 3) and has the same y-intercept as $y - 5 = 2(x - 1)$	65. what is the slope of the line $y - 8 = \frac{1}{2}(x + 2)$
66. Find the y-intercept of the line $y + 3 = 4(x + 3)$	67. what is the x-intercept of the line $y = 3x - 7$
68. when $y - 1 = -\frac{4}{5}(x - 3)$ Is written in standard form using integers, what is the coefficient of x?	69. When $y = -\frac{5}{2}x + \frac{2}{3}$ is written in standard form using integers, what is the coefficient of y?

Pgs 314-317

For #1-6, find the slope of the line parallel to the graph of each equation

1. $y = \frac{1}{2}x + 2.3$	**2. $y = -\frac{2}{3}x - 1$**	**3. $y = x$**
4. $y = 6$	5. $3x + 4y = 12$	6. $7x - y = 5$

Are the graphs of the lines parallel? Explain

7. $y = 4x + 12$ $-4x + 3y = 21$	8. $y = -\frac{3}{2}x + 2$ $3x + 2y = 8$	9. $y = \frac{1}{3}x + 3$ $x - 3y = 6$
10. $y = -\frac{1}{2}x + \frac{3}{2}$ $5x - 10y = 15$	11. $y = -3x$ $21x + 7y = 14$	12. $y = \frac{3}{4}x - 2$ $-3x + 4y = 8$

For # 13-18 write an equation for a line that is parallel to the given line through the given point

13. $y = 6x - 2$ (0, 0)	14. $y = -3x$ (3, 0)	15. $y = -2x + 3$ (-3, 5)

314-317

16. $y = -\frac{7}{2}x + 6$ (-4, -6)	17. $y = 0.5x - 8$ (8, -5)	18. $y = -\frac{2}{3}x + 12$ (5, -3)

74. which equation has as its graph a line parallel to the graph $-2x - 4y = 3$? F. $y = -\frac{1}{2}x + 5$ G. $y = 2x - 6$ H. $y = -2x + 4$ I. $y = \frac{1}{2}x - 2$	76. suppose the line through (x, 6) and (1,2) is parallel to the graph of $2x + y = 3$. Find the value of x. Show your work.

Compare the equation in column A with the equation in column B. Choose the best answer.

A. The quantity in column A is greater
B. The quantity in column b is greater
C. The two quantities are equal
D. The relationship cannot be determined from the information given

	Column A	Column B
77.	The slope of $y = -5x - 1$	The slope of $10x + 2y = -2$
78.	The product of the slopes of $y = -\frac{4}{3}x + 5$ and $3x + 4y = 12$	-1
79.	The slope of $6y = 3x + 10$	2

Pgs 314-317 day 2

For #19-24, find the slope of the line perpendicular to the graph of each equation

19. y = 2x	**20. y = -3x**	**21. $y = \frac{7}{5}x - 2$**
22. $y = -\frac{x}{5} - 7$	23. 2x + 3y = 5	**24. y = -8**

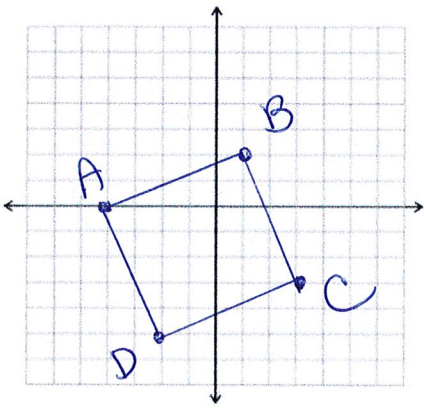
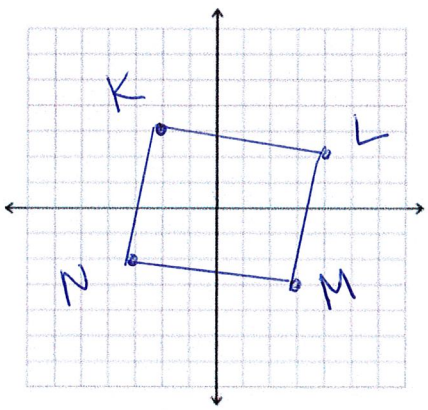
For #25-30 write an equation for a line that is perpendicular to the given line through the given point.

25. y = 2x + 7 (0, 0)	26. y = x – 3 (4, 6)	27. $y = -\frac{1}{3}x + 2$ (4, 2)
28. 3x + 5y = 7 (-1, 2)	29. -10x + 8y = 3 (15, 12)	30. 4x – 2y = 9 (8, -2)

Tell whether the lines are parallel, perpendicular, or neither. Explain.

32. $y = 4x + \frac{3}{4}$ $y = -\frac{1}{4}x + 4$	**33. $y = \frac{2}{3}x - 6$ $y = \frac{2}{3}x + 6$**	**34. y = -x + 5 y = x + 5**

pgs 314-317

35. $y = 5x$ $\quad y = -5x + 7$	**36.** $y = \frac{x}{3} - 4$ $\quad y = \frac{1}{3}x + 2$	**37.** $x = 2$ $\quad y = 9$
38. $2x + y = 2$ $\quad 2x + y = 5$	39. $3x - 5y = 3$ $\quad -5x + 3y = 8$	
40. $4x - 3y = 36$ $\quad 3x + 4y = 20$	41. $2x - 5y = 15$ $\quad 2x + 5y = 10$	
63. use slopes to determine if the figure drawn is a rectangle. 	64. use slopes to determine if the figure drawn is a rectangle. 	
68. determine if the lines are parallel, perpendicular, or neither. $ax - by = c$ $\quad -ax + by = d$	69. determine if the lines are parallel, perpendicular, or neither $ax + by = c$ $\quad bx - ay = d$	