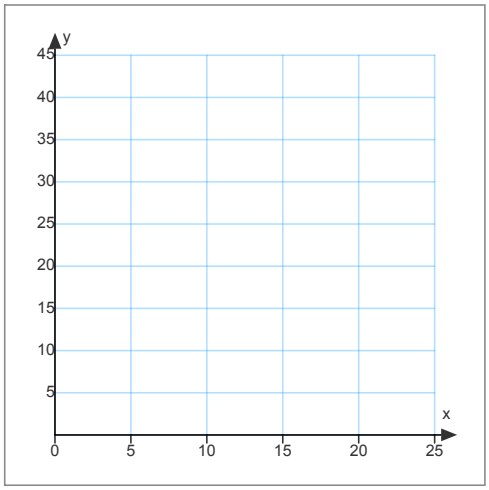
Alg 1 Friday Week 12 Warm-up

Skill 5: Evaluate and Graph a Function.

Lauren wants to take a taxi from the hotel to a friend's house. The rate is $3.00 plus $1.50 per mile. Draw a graph to represent the cost of using the taxi cab for a ride up to 20 miles.

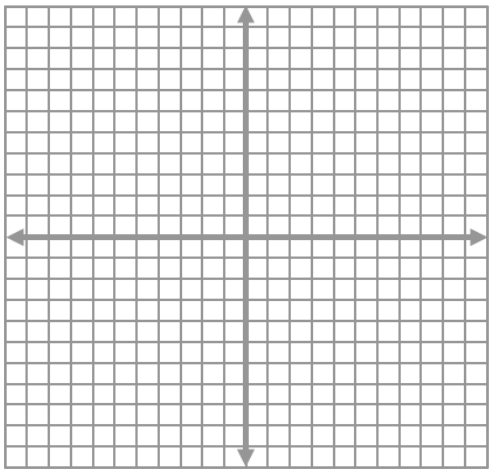
How long is the ride if the trip costs $30?

X	Y



Skill 6: Graph a linear equation.

$$y+2x-4=0$$



Skill 7: Write the Equation of a Line passing through 2 points.

(-1,7) and (2,-5)

Skill 8: Write the equation of a line parallel or perpendicular to a given line through a given point.

Write the equation of a line parallel to $y = 2x - 4$ that goes through the point (-3,5).

Alg 1 **"Intercepts Method Worksheet"** Name _____

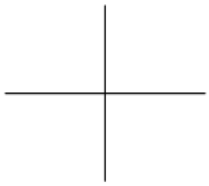
Friday CW: 1-10, 20, 22 HW: rest of worksheet

Computing the *x*- and *y*- Intercepts of a Linear Equation and **Graphing Using the Intercepts**

1. Define the *x*-intercept of a line.

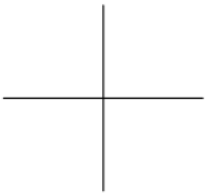
2. Define the *y*-intercept of a line.

3. Draw a line on the graph and indicate the *x*-intercept.



4. Give the *x*-intercept as an ordered pair.

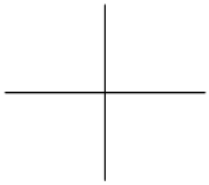
5. Draw another line on the graph and indicate the *y*-intercept.



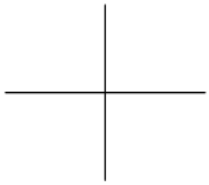
6. Give the *y*-intercept as an ordered pair.

Calculate the *x*- and *y*- intercepts for the following linear equations. List the intercepts as ordered pairs. Graph.

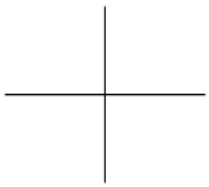
7. $5x + 3y = 15$



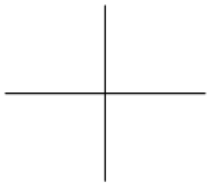
8. $7x - 4y = 28$



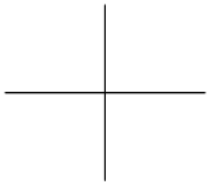
9. $-4x + 3y = 12$



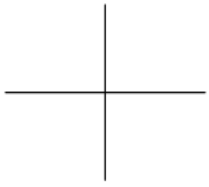
10. $-10x - 30y = 90$



11. $6x + 3y = -12$

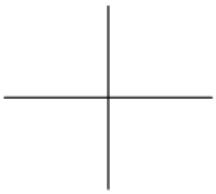


12. $-x + 3y = 6$

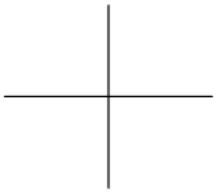


Graph each equation using the x- and y- intercepts:

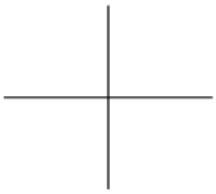
13. $9x - 6y = -36$



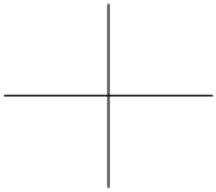
14. $-2x - 3y = -12$



15. $5x - 2y = 10$

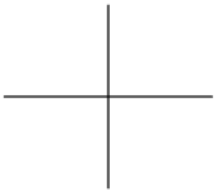


16. $-8x + 10y = 40$

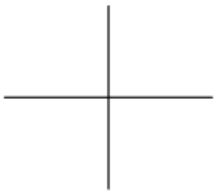


Graph a line that matches each description:

17. y-intercept is (0, 3) and doesn't have an x-intercept. (Never hits the x-axis.)



18. x-intercept is (-2, 0) and doesn't have a y-intercept. (Never hits the y-axis.)



Write an equation in of the line that passes through the given point and is parallel to the graph of the given equation.

19. (1,3) y= 3x+2

20. (1,3) y+2= 4(x-1)

21. (0,0) y= 2/3 x +1

Write an equation in of the line that passes through the given point and is perpendicular to the graph of the given equation.

22. (0,0) y= -3x+2

23. (-3,2) x-2y =7

24. (5,0) y+1= 2(x-3)