Be able to know and interpret the three types of Linear Equations.

- 1) What is slope intercept form? How do you graph from slope intercept form?
- 2) What is standard form? How do you graph from standard form?
- 3) What is point slope form? How do you graph from point slope form?

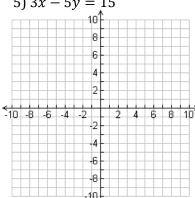
Be able to graph linear equations and inequalities.

4)
$$y = \frac{1}{3}x - 3$$

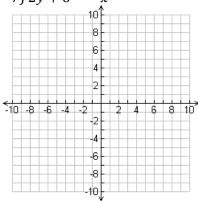
6)
$$y - 2 = \frac{2}{3}(x - 5)$$

8)
$$y > \frac{4}{3}x - 4$$

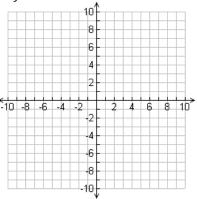
5)
$$3x - 5y = 15$$



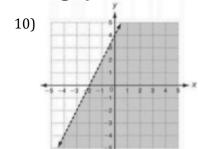
7)
$$2y + 6 = -x$$

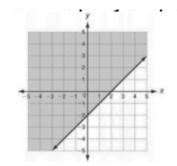


9)
$$x \le -8$$



Write the linear inequality for each.





Be able to solve for y to put each in slope intercept form.

12)
$$5x - 3y = 15$$

$$6y - x = 10$$

14)
$$7y = -14x + 28$$

Be able to find x and y intercepts from an equation. 15) Jaime bought a jar of 50 vitamins. His two children each take one vitamin each day. The number of vitamins left in the jar after x days is represented by the function y = 50 - 2x. a. Find the x intercept. What does it mean in terms of the situation? b. Find the y intercept. What does it mean in terms of the situation? Be able to write an equation in point-slope form. 16) A roller skating rink offers a special rate for birthday parties. On the same day, a party for 10 skaters costs \$107 and a party for 15 skaters costs \$137. a. Write an equation in point-slope form. b. How much would a party for 12 skaters cost? a. Write the equation in point-slope form for the line that passes through (4, 7) and (5, 1) 17) b. Solve for y to put this equation in slope-intercept form Be able to graph a linear inequality and interpret solutions. 18) A local Apple store wants to sell more than \$16,000 worth of Airpods (x) and Apple Watches (y). Airpods cost \$160 and Apple watches cost \$800. a. Write a linear inequality for this situation.

c. Find an ordered pair solution from the graph. What does it mean in the context of the situation?

b. Graph the solution.