Warm-Up

Write, in detail, the steps for creating a peanut butter and jelly sandwhich (As if you were explaining to someone who did not know)

HW #1 Answers

ANSWER KEY

1. x = -24
2. x = 1/3
3. x = 7/9
4. x = -84
5. $635,000
6. $x \geq 3$
7. $x \leq 0$
8. 13 games; No, you have .25 left
9) $x = 7 \text{ or } x = -2$
10) $x = \frac{81}{2}$ or $x = -\frac{27}{2}$
11) $x \leq -\frac{7}{3} \text{ or } x \geq 9$
12) $-112 < x < 32$

Objective: Today will we continue to review topics from algebra 1 to refresh our memories.

Agenda:

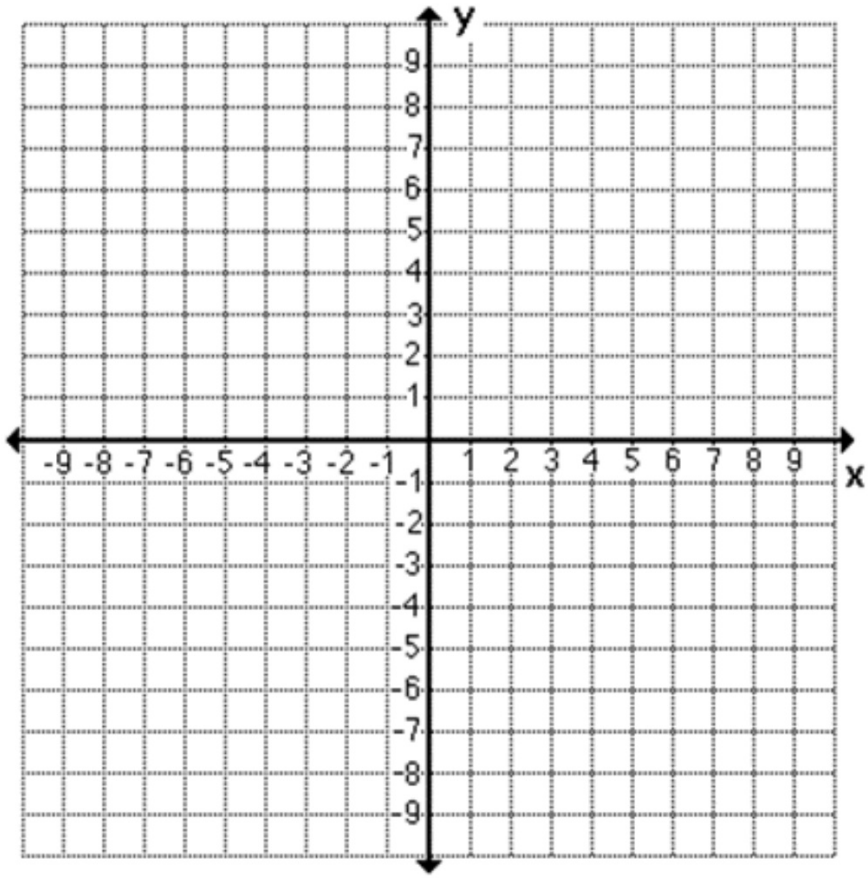
- Warm -up
- Review of graphing and writing linear equations, and systems of equations
- Packet

Day 2 (1/29) Algebra Review Examples

A car salesman earns a base salary of $20,000 per year in addition to 9% of the total amount of his sales per year. If he earned $53,435 in a year, what was the total amount of the cars he sold?

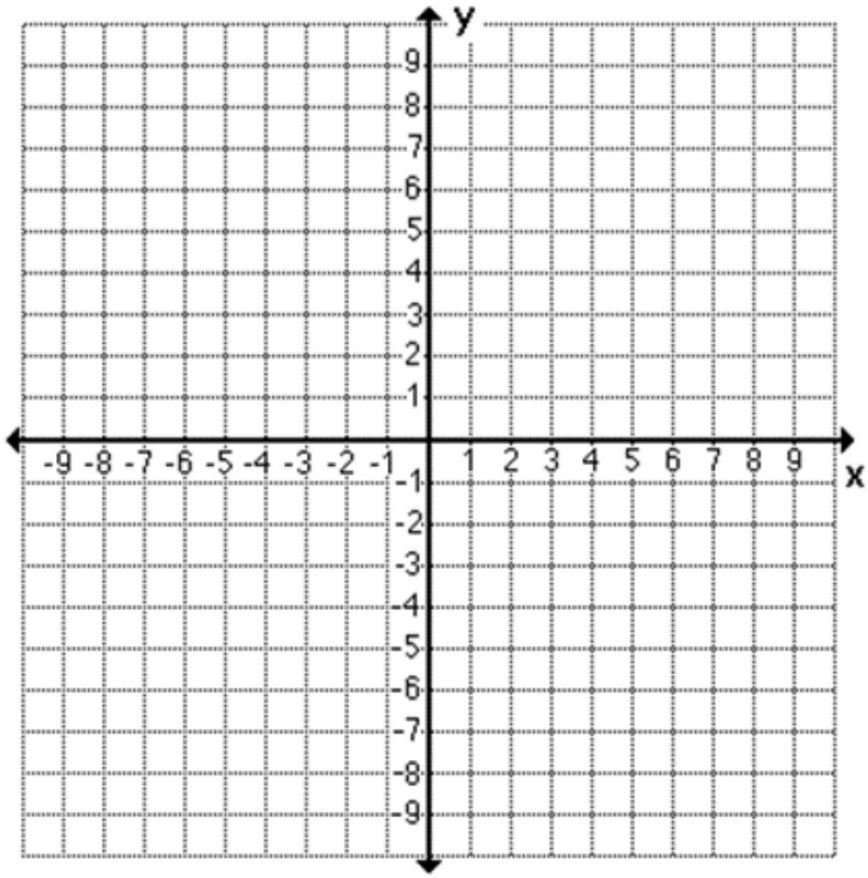
Graphing Equations and Inequalities

$2x + 3y = 12$



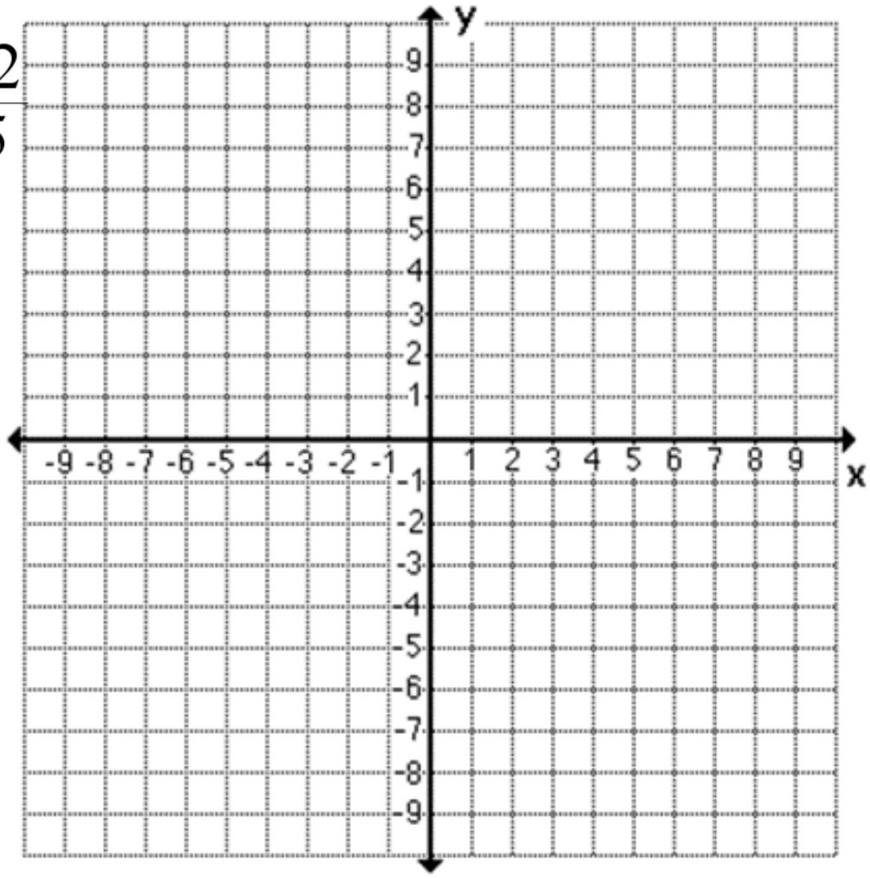
Graphing Equations and Inequalities

$y - 5x < 3$



Graphing Equations and Inequalities

$$\frac{2}{15}x - \frac{3y}{5} \leq \frac{12}{5}$$



You have $10 to spend on candy. Gummi bears are $1.75 per bag and m+ms are $1.20 per bag.

Write a linear inequality in two variables to represent how many bags of each type of candy you can buy.

Writing Equations of lines

1. What is the slope and y-intercept of $5x + 7y = 28$

2. Write an equation with a slope of 4 and a y intercept of -9

3. Write an equation of the line that has a slope of 7 and goes through the point (3, -2)

Write an equation of a line that goes through the points (5,-3) and (8, 9)

Remember!

Parallel lines have the _____ slope

Perpendicular lines have _____ slopes

Write the equation of a line that is perpendicular to $y = 4x + 6$ and contains the point $(8, -3)$

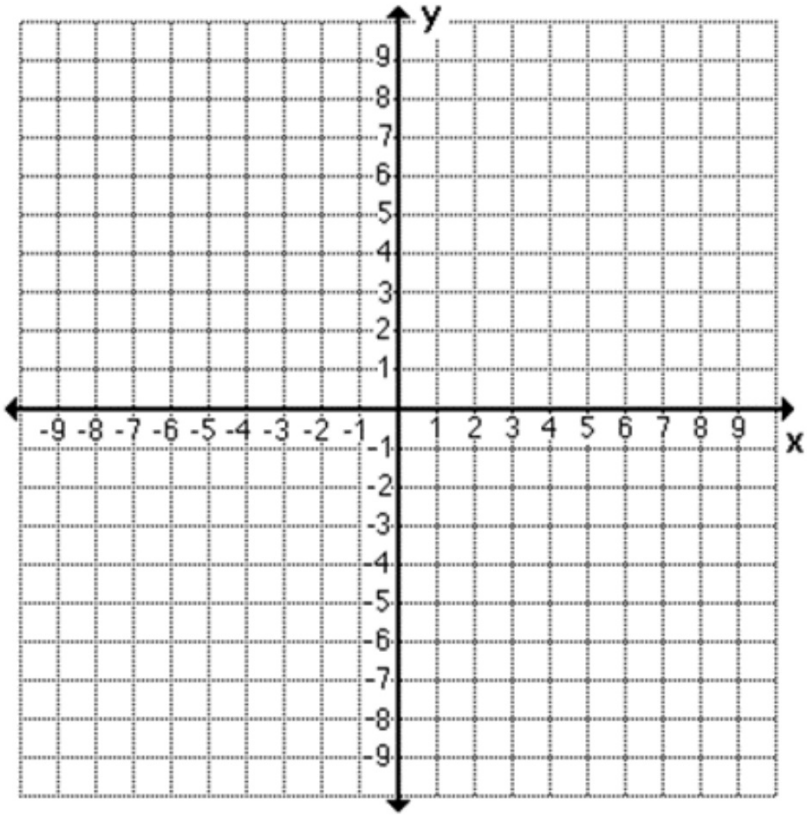
Parallel to the line through (-3,4) and (11,-3) and passing through the point (10,13)

Systems of equations

- Graphing
- Substitution
- Elimination

Graphing

- Linear
- Inequalities
- No Solution



Substitution

Solve.

$$-4x - 5y = -3$$
$$x - 2y = 4$$

Elimination

Solve.

$$x + 2y = 2$$
$$3x - 8y = -22$$

$$x - 2y = -6$$
$$-3x + 6y = 8$$

$$2x + 16y = 14$$
$$x + 8y = 7$$