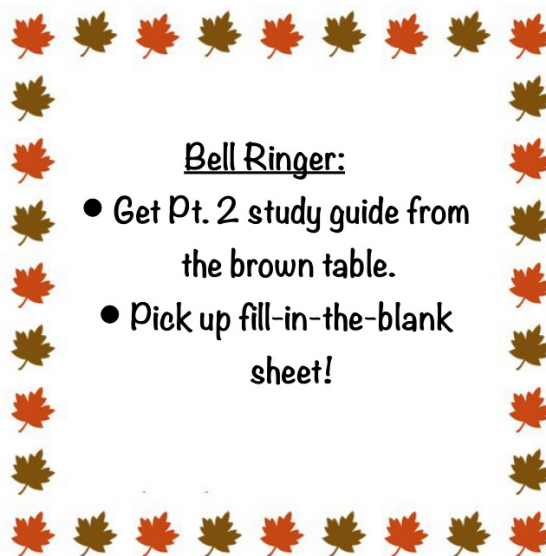






“Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time.”

Thomas A. Edison



Bell Ringer:

- Get Pt. 2 study guide from the brown table.
- Pick up fill-in-the-blank sheet!

King, Miya	Cardona, Luis	Cook, Raymond	Goodner, Keonshay	Brown, Kyron	Boshra, Jouvani	Falls, Jason
Al-magsosi, Ali	Mehdiyar, Erica	Trotter, Enya	Falls, Garth	Sanders, Seth	Solis, Angel	Armstrong, Olivia
Farrar, Austin	Levy, Dov	Anderson, Kevin	Davis, Fenasha	Liggett, Eric	Falls, Elijah	
						

Lesson 3-6 Write Linear Equations

- Which of the following equations is in point-slope form?
 A. $x - 8 = 7(y - 1)$ B. $y = 6x - 2$
 C. $2x - 3y = 6$ D. $y - 2 = 3(x - 5)$
- Write an equation in point-slope form for the line that passes through (3, 5) with a slope of 1.
 A. $y - 5 = 1(x + 3)$ B. $y - 5 = -(x - 3)$
 C. $y + 5 = 1(x - 3)$ D. $y - 5 = 1(x - 3)$
- Write an equation in point-slope form for the line that passes through (6, -4) with a slope of -4.
 A. $y + 4 = -4(x + 6)$ B. $y + 4 = 4(x - 6)$
 C. $y + 4 = -4(x - 6)$ D. $y - 4 = -4(x - 6)$
- Write an equation in slope-intercept form for the line that passes through (2, 4) and (4, 5).
 A. $y = x + 3$ B. $y = x - 3$ C. $y = x - \frac{1}{3}$ D. $y = \frac{1}{2}x + 3$
- The cost of taking art classes is shown in the table. Write an equation in point-slope form to represent the cost y of attending x art classes.

Number of Classes	Cost (\$)
5	75
10	150

- A. $y - 75 = 15(x - 5)$ B. $y - 15 = 75(x - 5)$ C. $y - 75 = 5(x - 15)$ D. $y - 5 = 15(x - 75)$

4.) What form? SLOPE-INTERCEPT!!
 (2,4) & (4,5).

$$\frac{5-4}{4-2} = \frac{1}{2} = m$$

$$y = mx + b$$

$$4 = \frac{1}{2}(2) + b$$

$$\frac{2}{2} = 1$$

$$4 = 1 + b$$

$$-1 \quad -1$$

$$3 = b$$

3) What form? POINT SLOPE!!! (6, -4) with a slope of -4

$$y - y_1 = m(x - x_1)$$

$$y - (-4) = -4(x - 6)$$

Unit – 6 – Chapter 3 – Lesson 5
Graph a Line Using Intercepts

Slope-Intercept Form (pg.210)

-The x-intercept of a line is the x-coordinate of the point where the graph crosses the x-axis.

- To find the x - intercept, let $y = 0$
- To find the y - intercept, let $x = 0$

Standard Form (pg. 211)

$$\underline{A}x + \underline{B}y = \underline{C}$$

Unit – 6 – Chapter 3 – Lesson 6
Write Linear Equations

Point-Slope Form of a Linear Equation (pg.222)

Equation:

$$y - \underline{y_1} = m(x - \underline{x_1})$$

** The point-slope form of a linear equation is tied DIRECTLY to the definition of slope. $\frac{y_2 - y_1}{x_2 - x_1} = m$

**You can write an equation of a line in point - slope form when you are given the slope and the coordinates of a point on the line that is NOT the y - intercept.

Unit – 6 – Chapter 3 – Lesson 7
Solve System of Equations by Graphing

Systems of Equations (pg. 234)

Two or more equations with the same set of variables are called a System of equations.

Number of Solutions (pg. 236)

- If the lines intersect, there is ONE solution.
- If the lines are parallel, there is NO solution.
- If the lines are the same, there is an infinite number of solutions.

Slopes & Intercepts (pg.237):

- Different slopes & y-intercepts, there is one solution, and only one solution.
- Same slope & different y-intercepts, there is NO solution.
- Same slope & same intercept, there is an infinite number of solutions.

Unit – 6 – Chapter 3 – Lesson 8
Solve System of Equations Algebraically

Solve a System Algebraically (pg.244)

Substitution is an algebraic model that can be used to find the exact solution of a system of equations.

Slope-Intercept & Standard forms:

**Sometimes one or both equations are written in standard form.

When solving a system by substitution, one of the equations should be solved for either x or y.

2. Peter makes \$6 an hour raking leaves and \$8 an hour babysitting. Last week, he earned \$100 working 15 hours. Solve the system by substitution to find the number of hours he working babysitting and raking leaves.

$$r + b = 15$$

$$6r + 8b = 100$$

- A. Raking leaves: 8 h
Babysitting: 6 h
- B. Raking leaves: 6 h
Babysitting: 8 h
- C. Raking leaves: 10 h
Babysitting: 10 h
- D. Raking leaves: ~~5~~h 10h
Babysitting: ~~10~~h 5h