Today's Plan:

Learning Target (standard): I will solve literal equations for a specific variable.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.
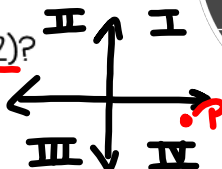
Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

NAME _____   #23

BELL RINGER   0:00:00

1.) In which quadrant is P(9, –2)?

QIV

2.) A car uses fuel at a rate of 25 miles per gallon. Estimate how many miles the car will travel on 11 gallons.

$$25 \frac{mi}{gal} \cdot 11 \, gal = 275 \, mi$$

3.) Solve $2\left[\frac{x}{2} - 4 = -12\right]$

$$x - 8 = -24$$
$$+8 \qquad +8$$
$$\boxed{x = -16}$$

Solve for c.

$$dg\left[\frac{c}{d} + 2 = \frac{f}{g}\right]$$

$$cg + 2dg = df$$
$$-2dg \quad -2dg$$

$$\frac{cg}{g} = \frac{df}{g} - \frac{2dg}{g}$$

$$c = \frac{df}{g} - 2d$$

Solve for c.

$$3ab - 2bc = 12$$
$$-3ab \qquad -3ab$$

$$\frac{-2bc}{-2b} = \frac{-3ab}{-2b} + \frac{12}{-2b}$$

$$c = \frac{3a}{2} - \frac{6}{b}$$

Solve for *y*.

$$3\left[z = \left(\frac{x+y}{3}\right)w \right]$$

$$3z = (x+y)w$$

$$3z = wx + wy$$
$$-wx \quad -wx$$

$$\frac{-wx}{w} + \frac{3z}{w} = \frac{wy}{w}$$

$$-x + \frac{3z}{w} = y$$

$$y = -x + \frac{3z}{w}$$

Solve for *d*.

$$2\left[A = \frac{1}{2}bcd + bc \right]$$

$$2A = bcd + 2bc$$
$$-2bc \qquad\quad -2bc$$

$$\frac{2A - 2bc}{bc} = \frac{bcd}{bc}$$

$$\frac{2A}{bc} - 2 = d$$

$$d = \frac{2A}{bc} - 2$$

Solve each equation for $\underline{x}$.

$$b\left[y = \frac{x - v}{b} \right]$$

$$by = \underline{x} - v$$
$$+v \qquad +v$$

$$by + v = x$$

$$x = by + v$$

Solve for x.

$$y-3\left[\frac{x - 4}{y - 3} = 6 \right]$$

$$x - 4 = 6y - 18$$
$$+4 \qquad\quad +4$$

$$x = 6y - 14$$

Solve for x.

$$g = f + fx$$

$-f \quad -f$

$$\frac{-f+g}{f} = \frac{fx}{f}$$

$$-1 + \frac{g}{f} = x$$

$$x = \frac{g}{f} - 1$$

Solve for y and then find the value of y given the value for x.

$$-4y + 16x = -12$$

$$x = \underline{-3}, \underline{2}, \underline{3}$$

$-4y + 16x = -12$

$-16x \quad -16x$

$$\frac{-4y}{-4} = \frac{-16x}{-4} - \frac{12}{-4}$$

$$\boxed{y = 4x + 3}$$

$y = 4(-3)+3$
$y = -12+3$
$y = -9$

$y = 4(2)+3$
$y = 8+3$
$y = 11$

$y = 4(3)+3$
$y = 12+3$
$y = 15$

Assignment:

Worksheet 2-5

#1-4,11,12,14-18

* Complete on a separate sheet of paper and show ALL steps! *