

# Today's Plan:

**Learning Target (standard):** I will review solving equations & inequalities and writing solutions in set and interval notation.

**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, and complete practice problems.

**Teacher will:** Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of practice problems.

**Assessment:** Board work, homework check and homework assignment

**Differentiation:** Students will work at the board, go over and correct homework at their seats, and actively engage in review problems.

## CP Algebra II ~ Unit 1 Review 2 #1-16

$$1) x = -1$$

$$2) x = \frac{33}{8}$$

$$3) n = 0, \frac{20}{3}$$

$$4) r = -\frac{48}{7}, 8$$

$$5) a = \frac{bg}{2} - \frac{1}{2}$$

$$6) x = -\frac{u}{16} - \frac{y}{4} - \frac{1}{2}$$

7)  $\mathbb{Z}$  (integer)

$\mathbb{Q}$  (rational)

$\mathbb{R}$  (real)

8) (irrational)

$\mathbb{R}$  (real)

$$9) \{n \mid n > 3\}; (3, \infty)$$

$$10) \{k \mid k \leq 4\}; (-\infty, 4]$$

$$11) \{b \mid -4 < b \leq 0\}; (-4, 0]$$

$$12) \{n \mid n \leq -11, n > -3\}; (-\infty, -11] \cup (-3, \infty)$$

$$13) \{n \mid n \leq 0, n \geq 2\}; (-\infty, 0] \cup [2, \infty)$$

$$14) \left\{ n \mid n \leq -\frac{40}{7}, n \geq 4 \right\}; \left(-\infty, -\frac{40}{7}\right] \cup [4, \infty)$$

$$15) \left\{ x \mid -4 < x < \frac{29}{5} \right\}; \left(-4, \frac{29}{5}\right)$$

$$16) \left\{ m \mid -\frac{8}{5} \leq m \leq 2 \right\}; \left[-\frac{8}{5}, 2\right]$$

Solve the inequality. Write the solution using set and interval notation.

$$\frac{|6-10a|}{7} \geq 3 \quad |6-10a| \geq 21 \quad \begin{array}{c} \leftarrow \bullet \quad \bullet \rightarrow \\ -21 \quad 0 \quad 21 \end{array}$$

$$6-10a \leq -21$$

$$-10a \leq -27$$

$$a \geq \frac{27}{10}$$

$$6-10a \geq 21$$

$$-10a \geq 15$$

$$a \leq -\frac{3}{2}$$

$$\left\{ a \mid a \leq -\frac{3}{2}, a \geq \frac{27}{10} \right\}$$

$$\left( -\infty, -\frac{3}{2} \right] \cup \left[ \frac{27}{10}, \infty \right)$$