

Today's Plan:

Learning Target (standard): I will use prime factorization trees to simplify radicals. I will then add or subtract radicals.

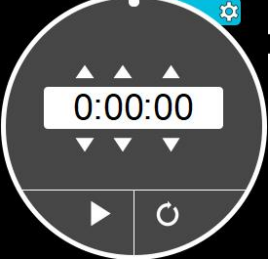
Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work and take a quiz on radicals.

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

Assessment: Board work, homework check and quiz

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

NAME _____



#159

BELL RINGER


1.) Is the sequence arithmetic? If so, find the common difference.
 $2, 5, 8, 11, \dots$ +3 =3

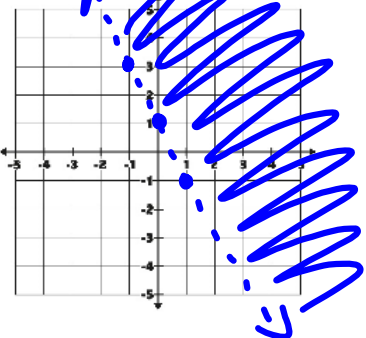
2.) Solve $2(x - 1) = -12$ $2x = -10$
 $2x - 2 = -12$ $x = -5$

3.) Graph $y > -2x + 1$

$m = -2$

$I_y: (0, 1)$





Simplify.

$$\sqrt{44y^5}$$

$$= \sqrt{2 \cdot 2 \cdot 11 \cdot y \cdot y \cdot y \cdot y \cdot y}$$

$$= 2 \cdot y \cdot y \sqrt{11 \cdot y}$$

$$= 2y^2 \sqrt{11y}$$



Simplify.

$$-\sqrt{63a^8b^{10}}$$

$$= -\sqrt{3 \cdot 3 \cdot 7 \cdot a \cdot a \cdot a \cdot a \cdot a \cdot a \cdot b \cdot b \cdot b \cdot b \cdot b \cdot b \cdot b \cdot b}$$

$$= -3 \cdot a \cdot a \cdot a \cdot a \cdot b \cdot b \cdot b \cdot b \cdot b \sqrt{7}$$

$$= -3a^4b^5\sqrt{7}$$



Simplify.

$$-3\sqrt{24} + 2\sqrt{3} + 5\sqrt{27}$$

$\begin{array}{c} \wedge \\ 4 \ 6 \\ \wedge \ \wedge \\ 2 \ 2 \ 3 \ 2 \\ \wedge \ \wedge \\ 2 \ 2 \end{array}$
 $\begin{array}{c} \wedge \\ 9 \ 3 \\ \wedge \\ 3 \ 3 \end{array}$

$$= -3\sqrt{2 \cdot 2 \cdot 2 \cdot 3} + 2\sqrt{3} + 5\sqrt{3 \cdot 3 \cdot 3}$$

$$= -3 \cdot 2\sqrt{2 \cdot 3} + 2\sqrt{3} + 5 \cdot 3\sqrt{3}$$

$$= -6\sqrt{6} + 2\sqrt{3} + 15\sqrt{3}$$

$$= -6\sqrt{6} + 17\sqrt{3}$$

Simplify.

$$-3\sqrt{3} - 2\sqrt{12} - 2\sqrt{27}$$

$\begin{array}{c} \wedge \\ 4 \ 3 \\ \wedge \\ 2 \ 2 \end{array}$
 $\begin{array}{c} \wedge \\ 9 \ 3 \\ \wedge \\ 3 \ 3 \end{array}$

$$= -3\sqrt{3} - 2\sqrt{2 \cdot 2 \cdot 3} - 2\sqrt{3 \cdot 3 \cdot 3}$$

$$= -3\sqrt{3} - 2 \cdot 2\sqrt{3} - 2 \cdot 3\sqrt{3}$$

$$= -3\sqrt{3} - 4\sqrt{3} - 6\sqrt{3}$$

$$= -13\sqrt{3}$$

Simplify.

$$3\sqrt{3} - \sqrt{54} - 3\sqrt{27}$$

$\begin{array}{c} \wedge \\ 2 \ 27 \\ \wedge \\ 3 \ 9 \\ \wedge \\ 3 \ 3 \end{array}$
 $\begin{array}{c} \wedge \\ 3 \ 9 \\ \wedge \\ 3 \ 3 \end{array}$

$$= 3\sqrt{3} - \sqrt{2 \cdot 3 \cdot 3 \cdot 3} - 3\sqrt{3 \cdot 3 \cdot 3}$$

$$= 3\sqrt{3} - 3\sqrt{2 \cdot 3} - 3 \cdot 3\sqrt{3}$$

$$= \underline{3\sqrt{3}} - 3\sqrt{6} - \underline{9\sqrt{3}}$$

$$= -6\sqrt{3} - 3\sqrt{6}$$