Objective: Given an rational equation, students will find its solution algebraically, graphically and explain the process.

Study Problems pg 50 so #1, 15-23 odd

Section P-4 Solve Equations

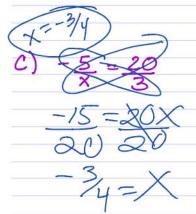
- 1.) I will be able to solve quadratic equations by factoring and completing the square.
- 2.) I will be able to solve a radical equation by combining fractions.
- 3) I will be able to solve absolute value equation by writing two equation.
- 4) I will be able to solve radical equations by simplifying the power to one.

Warm up

Solve for the variable.

a)
$$8-3n=-8n+23$$

b) 3x - (x-1) = 1 - (3x-9)



Example 1

Determine whether the given values of x are solutions of the equation. Justify your answer. $\angle CD = 2 \times$

$$\frac{5}{2x} - \frac{4}{\pi} = 3$$

$$2\times(\frac{5}{2})-2\times(\frac{4}{2})=3(2x)$$

 $5-2(4)=6x$

$$(A) x = -1/2$$

B)
$$x = 4$$

$$\frac{-3}{6} = \frac{6}{8}$$

C)
$$x = 0$$

D) $x = 1/4$

Example 2

Solve the equation. Show all the work.

$$\frac{14.}{2} + 6x = \frac{19}{14}$$

$$7x + 2(6x) = 19$$

$$7x + 12x = 19$$

$$19x = 19$$

Example 3

Solve for the variable.

(x5) $\frac{3}{3} + \frac{4}{3} \times \frac{1}{3} \times \frac{1}$

$$\begin{array}{c}
\text{LCD} = X(X-3) \\
X^2-3X
\end{array}$$

$$3 + 4(x-3) = 1(x)$$

 $3 + 4x - 12 = x$

$$-9 = -3 \times$$