Solve.

$$15\left(\frac{2}{5}c - 2\right) = \left(\frac{7}{3}\right)15$$

$$6c - 30 = 35$$

$$+30$$

$$4c = 65$$

$$65$$

Multiply both sides of the equation by the LCM of 5 and 3 which is 15. Then finish solving for x.

## Solving problems involving "many" fractions.

1. Solve 
$$\sqrt{\frac{3}{11}x + \frac{5}{11}} = \frac{18}{11}$$

Multiply both sides of the equation by 11 and finish solving for x.

$$3x + 5 = 18$$
 $-5 - 5$ 
 $3x + (3)$ 

or

Get all terms to have the same denominator then cancel the denominators and finish solving for x.

The LCM of 5, 15 and 3 is

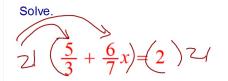
$$\frac{3}{3} \cdot \frac{2}{5}c - \frac{2}{1} \cdot \frac{5}{15} \cdot \frac{7}{3} \cdot \frac{5}{5}$$

$$\frac{1}{\sqrt{5}} = \frac{30}{\sqrt{5}} = \frac{35}{\sqrt{5}} = \frac{35}{\sqrt{5}} = \frac{35}{\sqrt{5}} = \frac{35}{\sqrt{5}} = \frac{5}{\sqrt{5}} = \frac{5}{\sqrt{5}}$$

2. Solve. 
$$\left(\frac{8}{5} + \frac{7}{15}x\right) = \left(\frac{2}{3}\right) l \le 1$$

15. Multiply both sides of the equation by 15 and finish solving for x.

$$\frac{7}{7} = -1$$



The LCM of 3 and 7 is 21. Multiply both sides of the equation by 21 and finish solving for x.

$$\frac{35}{35}$$
 +  $18x = 42$   
 $18x = 7$   
 $18x = 7$ 

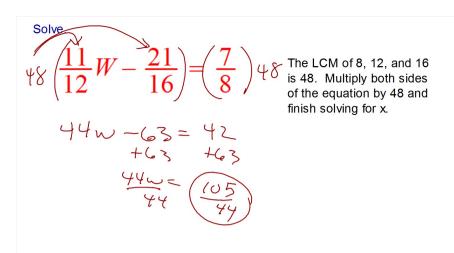
You can now finish Hwk #10

Sec 2-3

due tomorrow

Page 91

Problems 21-27



Find the exact solution to this equation.

$$\frac{12.8}{5.12} = \frac{19}{4.15}$$

$$\frac{16}{5.12} + \frac{95}{5.12} = \frac{105}{4.15}$$

$$\frac{16}{5.12} + \frac{105}{5.12} = \frac{105}{5.12}$$

$$\frac{16}{5.12} + \frac{105}{5.12} = \frac{105}{5.12}$$

$$\frac{16}{5.12} + \frac{105}{5.12} = \frac{105}{5.12} = \frac{105}{5.12}$$

Solve.

$$44 \left(\frac{5}{4}\right) = \left(\frac{B}{11}\right) 46$$

$$55 = 48$$

$$6 = \frac{55}{4}$$

$$6 = \frac{55}{4}$$

Or Cross Multiply

Equations with variables on Both Sides of the equal sign:

- Simplify each side first. Use Distributive Property if necessary.
- Move all the variables to one side of the equation.
- Solve.

You were given \$100 for your birthday and plan to save \$10 a week.

Your brother sold his bike for \$350 and planed to save \$5 a week.

In how many weeks will the two of you have the same amount of money?

$$|00| + 10w = 350 + 5w$$

$$-5w - 5x$$

$$-5w - 350$$

$$\frac{5w - 250}{5}$$

Solve.

$$4x - 3 = 7x + 14 - 5x + 1$$

$$4x - 3 = 2x + 15$$

$$-2x$$

$$2 \times 73 + 15$$

$$+3$$

$$2 \times 73 + 18 = x = 9$$

$$2x = 12 + 4x$$

$$-4x$$

$$-4x$$

$$-4x$$

$$-4x$$

$$-4x$$

$$-4x$$

$$-4x$$

$$-4x$$

$$2x = 12 + 4x$$

$$-2x$$

$$0 = 12 + 2x$$

$$-12 = 1x$$

$$(-6 = X)$$