What's Going On?

Checking In LGL

Minds on Solving for x

Action! "Dealing With" Fractions

Consolidation Stepping Out

Learning Goal - I will be able to solve equations involving fractions!

Checking In

LGL

Do this, AS ALWAYS, with the Learning Goal from last time.

Solve for x.

$$3(4x - 5) = -5(1 - 2x) - 3$$
1. Distributive Property!
$$-12x - 15 = -5 + 10x - 3$$

$$12x - 15 = 10x - 8$$

$$-10x$$

$$2x - 15 = -8$$

$$+15$$

$$15$$

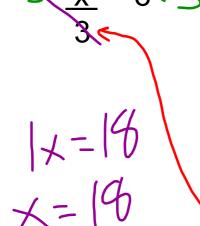
$$2x = 7$$

$$x = 7/2 \text{ or } 3.5$$

Minds on

Solving for x

Solve for x.



You can simplify equations involving one fraction by multiplying both sides by the denominator of the fraction.

You can simplify equations

involving one fraction by multiplying both sides by the

denominator of the fraction.

Action!

"Dealing With" Fractions

Solve for x.

$$3(x-5) = 6 \cdot 4$$

$$3(x-5) = 6$$

Action!

"Dealing With" Fractions

Solve for x.

$$\frac{2}{5}(x+3) = 8$$

$$5 \cdot 2(x+3) = 8 \cdot 5$$

$$2(x+3) = 8 \cdot 5$$

$$2(x+3) = 40$$

$$\frac{3(x-5)}{4} = 6$$

$$\frac{3}{4} \text{SAME!}$$

$$\frac{3}{4} (x-5) = 0$$

$$2(x+3)=40$$
 $2x+6=40$
 $2x=34$
 $x=17$

$$2(x+3)=40$$

 $x+3=20$
 $x=17$

Action!

"Dealing With" Fractions

Solve for x.

$$\frac{2(2x+6)}{3} = \frac{3(x-4)}{4}$$

When eliminating more than one fraction, eliminate one fraction at a time by multiplying both sides by each denominator.

$$\frac{2(2x+6)}{3} = \frac{3(x-4)}{4}$$

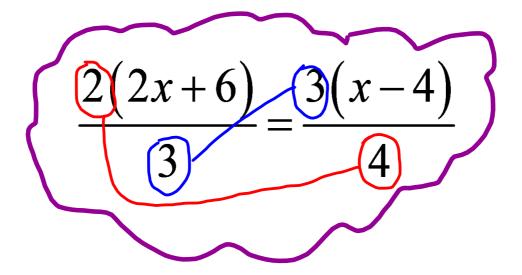
When eliminating more than one fraction, eliminate one fraction at a time by multiplying both sides by each denominator.

$$\frac{1}{3} \frac{2(2x+6)}{3} = \frac{3}{3} \frac{3(x-4)}{4}$$

$$\frac{2(2x+6)}{3} = \frac{9(x-4)}{4}$$

$$\frac{1}{4} \cdot 2(2x+6) = \frac{1}{4}$$

$$\frac$$



Whoa! We can just "cross multiply"?! Yes, but no!

Consolidation

Stepping It Out

Solve.

$$\frac{1}{3}(2x-5) = \frac{3}{4}(x-2)$$

Get this to the point where there are NO more fractions!

to the point where there are NO most
$$\frac{3}{5} \cdot \frac{3}{2} \cdot \frac{3}{2}$$

Get rid of the fractions!

$$\frac{-3(4x-3)}{7} = \frac{5}{6}(x-6)$$

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$$\frac{7\cdot -24(4x-3)}{7} = \frac{5}{6}(x-6)$$

$$-24(4x-3) = \frac{5}{6}(x-6)$$

Solve for x

$$\frac{1}{3}(2x-5) = \frac{3}{4}(x-2)$$

Consolidation

Homework!!!

Pg. 208 1-4, 6-4