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WARMUP 11/(THE SOLUTION TO 4X + 6 = 42)

 Draw a bar diagram to represent the equation
5x + 3 = 2x + 15. Then use your diagram to show the solution of the equation (by circling things, crossing things out, etc.)

2. Now solve the equation 5x + 3 = 2x + 15 the "old-fashioned" way – by showing the equation steps.



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Equations w/ Variables on Both Sides

Objective:

Solve equations with variables on both sides

Understand the difference with when they're on the same side and when they're not

15

2 variable terms on the SAME SIDE:Combine like terms

2 variable terms on OPPOSITE SIDES:

•"Get rid" of one of them: add or subtract the x's on both sides the same way you do with regular numbers

IF YOU KEEP STRUGGLING WITH THESE...

I am <u>always</u> going to go back to the picture. The pictures really help explain why you solve these the way you do!

3x + 2x = 45

x = 9

4x = 2x + 18

x = 9

$$6x - 2x = 88$$

x = 22

8x + 4 = 2x + 28

x = 4

-3x + 16 = x + 20

x = -1

2x + 9 + 5x + 8 = 24

x = 1

$$5\mathbf{x} - \mathbf{8} = \mathbf{x} + \mathbf{5}$$

$$x = \frac{13}{4}$$
 or 3.25

-2x + 10 = -8x - 20

x = -5

$$2x + 7 = 5x + 35$$

$$x = -\frac{28}{3} or - 9\frac{1}{3}$$

SOME FOR YOUR NOTES:

SOLVE AND CHECK:

-3x + 31 = 2x + 6

SOME FOR YOUR NOTES...

SOLVE 5x + 10 - 3x = 12 - 4x - 44

FRACTIONS?!?!? SOLVE $-32 + \frac{2}{3}x = \frac{7}{3}x + 3$

$$4x + 4 = x - 11$$

x = -5

8x + 7 - 5x = 11 + x

x = 2

-x - 11 = -3x + 7x = 9

$15 - \frac{1}{6}x = \frac{1}{6}x - 1$ x = 48

HOMEWORK (DUE TUESDAY)

Big Yellow Equations Worksheet

I will also extend the ALEKS deadline by one day. If you do your ALEKS on Monday, it will not be counted late.