

Section A.1 Solving Equations

Steps for Solving Equations!

1. Distribute and combine like terms.

$$2(x - 3) + 5 = 18$$

$$4x - (5 - 2x) = 3x + 6$$

2. Move all variables to the left (or right) by adding the negatives or subtracting the positives

$$4x + 6 = 8x - 8$$

$$x - 2 = 4 - 3x$$

3. Move the other numbers by doing inverse operations (you guys are great at those)! Start with what is not touching the variable.

$$2x - 8 = 10$$

$$\frac{x}{4} + 5 = 10$$

If there are fractions....

- Get rid of big divides before getting rid of the number on the top of the fraction

$$\frac{x+3}{5} = 8$$

$$\frac{2x-4}{3} - 4 = 7$$

- To get rid of fractions at the beginning, multiply everything by the denominator(s)!

$$\frac{x}{4} + 3 = 3 + 2x$$

$$5 + \frac{x}{2} = \frac{1}{2} + \frac{2x}{3}$$