3.3: Solve Multi-Step Equations

Goals: *Solve multi-step equations by combining like terms *Solve multi-step equations using the distributive property *Solve multi-step equations by multiplying by reciprocals

Steps to Solving Multi-Step Equations

S –			
D –			
C –			
B –			
A –			

Combine Like Terms:

Ex: 8x - 3x - 10 = 20

Ex: 9x + x - 7 = 13

Use the distributive property:

Ex: 7x + 2(x + 6) = 39

Ex: 4x + 3(x - 5) = 6

Using Reciprocals:

Ex:
$$\frac{3}{4}(z-6) = 12$$
 Ex: $\frac{3}{2}(3x+5) = -24$

Ex: $\frac{2}{5}(r+4) = 10$

Ex: $-\frac{4}{5}(4a-1) = 28$