Essential Questions: How do we solve equations involving decimals? How do we solve absolute value equations?

Do Now:

       (a) $0.04(100) = $ _____

       (b) $0.3(10) = $ _____

       (c) $0.105($_____$) = 105$

Key Concept:

Examples:

(1.) $0.06x - 1 = 0.2$ (2.) $0.12x - 0.5 = 0.02 - 0.01x$

(3.) $0.002(x + 5) = 0.015 - 0.003x$

Solving Absolute Value Equations

What is the value of x?

a. $|x| = 5$

b. $\left|\dfrac{1}{2}x\right| = 5$

c. $|x + 2| = 5$

Key Concept:

Examples:

(4.) $|x - 2| = 5$

(5.) $|4x + 2| = 26$

(6.) $|2x - 7| - 5 = 4$

(7.) $2|4 - 8x| = 40$