Simplify each using order of operations.

1.)
$$10+20 \div (2+3\cdot6)$$

$$|0+\frac{20}{2+3\cdot6}$$

$$|0+\frac{20}{20}|0+|=|1|$$

Write an equation that represents each situation. Define your variables.

3.) There are 7 days in a week. Write an equation for the number of days in an unknown number of weeks.

$$d=7w$$

2.)
$$10 - 3 + 6 - 2 + 1$$

4.) There are 60 seconds in a minute. Write an equation for the number of minutes in an unknown number of seconds.

$$m = min'$$
 $S = seconds$
 $m = \frac{S}{60}$

$$X = -2 \qquad Y = 7 \qquad Z = -3$$

a.
$$2X^2 + Y$$

$$2(-2)^{2} + (7)$$

$$8 + 7 = 10$$

$$X = -2 \qquad Y = 7 \qquad Z = -3$$

c.
$$XZ^{2} + |YX - Z|$$

 $(-\lambda)(-3)^{\lambda} + |(7)(-\lambda) - (-3)|$
 $-|8 + |-1||$
 $-|8 + |1|$

$$X = -2$$
 $Y = 7$ $Z =$

b.
$$XY - Z$$

$$(-2)(7)-(-3)$$

 $-14+3=-11$

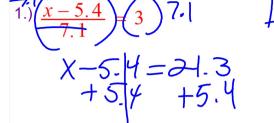
1.) A plumber charges \$75 to come to your house and \$35 an hour for repairs. If the plumber charged you \$355 write and solve an equation to find the number of hours they must have worked on your repairs.

red on your repairs.
$$75 + 35 \chi = 355$$

 $75 + 35 \chi = 280 \chi = 8 hrs$

Section 2.2-2.3: Two-Step/Multi-Step Equations

Solve this equation and check your answer.



Solve this equation and check your answer.

2.)
$$7 + 2(3x + 2) - 3x = 24$$

 $7 + 6x + 4 - 3x = 24$
 $X = 4.\overline{3}$
 $3x + 11 = 24$
 $3x = 13$
 $x = 13$

Solving is Order of Operations in Reverse

Work your way from FAR away from to the variable to CLOSE to the variable!

3.)
$$\frac{5C + 12}{11} + 6 = 70$$
 $\frac{11}{16} + \frac{5C + 12}{11} = 76 \cdot 11$
 $\frac{5C + 12}{11} = 76 \cdot 11$
 $\frac{5C + 12}{11} = 836$
 $\frac{5C = 884}{5}$

Solving 2-step Equations

You almost always save what step for last?

moving the coefficient

What do you move last?

4.)
$$8-4Q = 6$$
 -8
 $-4Q = -3$
 $Q = 1/3$
 $M = 3$
 $M = 3$
 $M = 3$

Solve each equation.

$$\frac{1. \sqrt{56} = 4 - 5p}{50} = -50$$

$$\frac{50}{5} = -10.4$$

2.
$$\frac{-w-12=-19}{+12}+12$$

$$-W=-7$$

$$W=7$$

5.
$$1 + \frac{4}{3}a = 25$$
 -1
 $3 + \frac{4}{3}a = 25$
 $3 + \frac{4}{3}a = 2$

3.
$$13 - \frac{k}{6} = 2$$

$$\frac{-13}{5} = 13$$

$$-6 + b = 13$$

$$-6 + b = 13$$

$$b = 18$$

$$K = 6b$$

Hwk #8 -Sec 2-1

Pages: 77 - 79

Problems: 6, 13, 14, 21, 29, 38, 49, 74, 75

5th hour only: Practice Ch. 1 Test

IXL #3 - A.2 & I.3 (& I.2 for extra credit)