

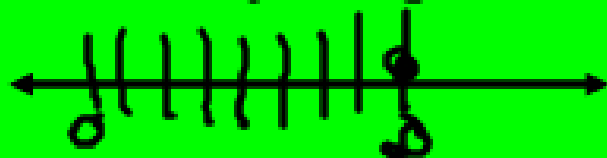
Section 4-2:
One-Step Equations
Multiplication/Division

Review:

$$\begin{array}{r} x + 7 = -1 \\ -7 \quad | \quad -7 \\ \hline x = -8 \end{array}$$



$$\begin{array}{r} y - 3 = 5 \\ +3 \quad | \quad +3 \\ \hline y = 8 \end{array}$$



$$\begin{array}{r} +4 + a = 22 \\ -4 \quad | \quad -4 \\ \hline a = 18 \end{array}$$



$$\begin{array}{r} -2 + b = 14 \\ +2 \quad | \quad +2 \\ \hline b = 16 \end{array}$$



**Remember, solving an equation
is like balancing a scale.**



**What you do to one side, you
must do to the other side.**

So how do we solve these types of problems?

$$\cancel{3}x = \cancel{6}$$

$$x = 2$$

$$\cancel{-4}y = \cancel{12}$$

$$y = -3$$

$$\cancel{(2)} \frac{x}{\cancel{2}} = 10 \cancel{(2)}$$

$$x = 20$$

$$\cancel{(-6)} \frac{y}{\cancel{-6}} = -30 \cancel{(-6)}$$

$$y = 180$$

Steps to solving equations:

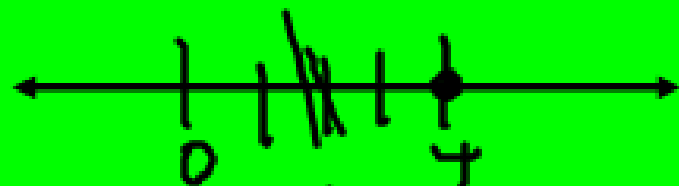
1. Do an inverse operation. If it says multiply, then divide.
2. Balance the equation. What you do to one side, you must do to the other.
3. Simplify

IBS

Ex 1: $7w = 28$

$$\frac{7w}{7} = \frac{28}{7}$$

$$w = 4$$



Ex 2: $-12y = -2$

$$\frac{-2}{-12}$$

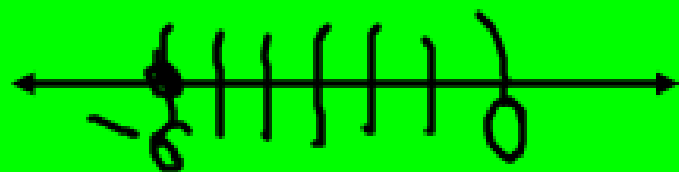
$$\frac{-2}{-12} = \frac{1}{6}$$



Ex 3: $-5x = 30$

$$\frac{-5x}{-5} = \frac{30}{-5}$$

$$x = -6$$



Ex 4: $-z = 17$

$$-z = 17$$
$$-z = -(-17)$$
$$z = -17$$



Ex 5: $\frac{a}{3} = 5$ (3)

$a = 15$



Ex 7: $\frac{b}{-6} = 2$ (-6)

$b = -12$



Ex 6: $\frac{c}{-4} = -2$ (-4)

$c = 8$



Ex 8: $\frac{d}{-1.5} = 4$ (-1.5)

$d = -6$

