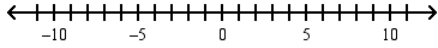
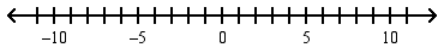


Assignment 16

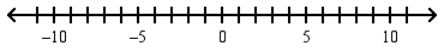
1. Graph: $x \leq -1$ or $x > 5$



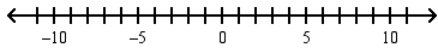
2. Graph: $x < 3$ or $x > 6$



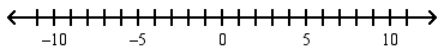
3. Graph: $x \geq 1$ and $x \leq 7$



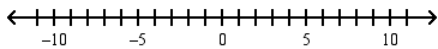
4. Graph: $x > -3$ and $x < 5$



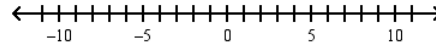
5. Graph: $x < -5$ or $x \geq 5$



6. Graph: $-1 < x < 6$



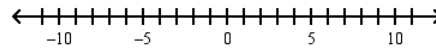
1. Solve and graph: $2x + 1 > -5 + 3x$



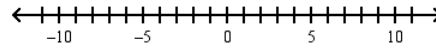
2. Solve and graph: $-3 - 4x \leq -5(2 + x)$



3. Solve and graph: $3 - x + 5 < 8 + x$



4. Solve and graph: $12 - 2x \geq 9 - x$



Name: _____

Solve each absolute value equation, remember two branches a plus and a minus branch.

1. $|x - 5| = 12$

2. $|3x - 6| = 6$

3. $|5 - x| = 8$

4. $6 = |4 - 2x|$

5. $1 = |3 + 2x|$

Solve each equation for the given variable.

1. $3(x-5)-1=8-(x+4)$

2. $3(y+2)-y=14-3(y+6)$

3. $8(y+1)-9=11-(y-6)$

4. $3a-(a-1)=5(a+2)+6$

5. $5-x+1=2(x+3)$

Function Practice

1.

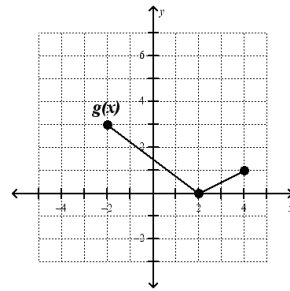
Let $f(x) = -\frac{1}{3}x$, find:

a) $f(12)$

b) $f(-15)$

c) $f(-9)$

2. $g(x)$ is shown graph $f(x) = g(x-1) + 3$.



3.

Let $f(x) = x^2 - 5$, find:

a) $f(-3)$

b) $f(-10)$

c) $f(3)$

d) $f(10)$

4.

Let $h(x) = \frac{4}{5}x + 2$ find:

a) $h(5)$

b) $h(20)$

c) $h(-10)$

Systems Review: Solve each system.

1.

$$3x = 2y$$

$$x + 2y = 24$$

2.

$$5x = 2y$$

$$3x - 2y = -20$$

3.

$$x = 4y$$

$$x + 4y = 24$$

4.

$$y = 2x + 5$$

$$5x - y = 1$$