Algebra 1   Name_____ ID: 1

Spiral Review through Functions

Date_____ Period____

Evaluate each expression using order of operations.

1) $(15 \times 2) \div 5 + 3 - 1$

2) $2 + 2 - (6 - (6 - 1))$

3) $(5 \times 2) \div (2 + 3)$

4) $5 \times 3 - 6 + 1 - 2$

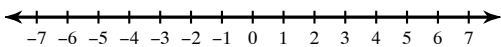**Solve each equation.**

5) $-4(3x - 7) = 4(1 - 3x) + 8$

6) $-8(8a + 8) - 2 = -(5a + 7)$

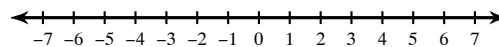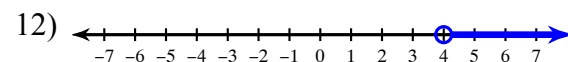7) $-5(-p + 6) - 3(3p + 4) = 1 - 4p + 7 + 5p$

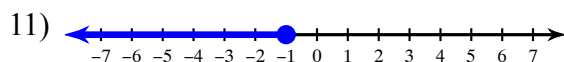8) $5(2 - m) - 1 = -3(2m - 4)$

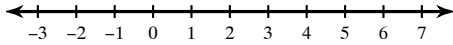**Draw a graph for each inequality.**
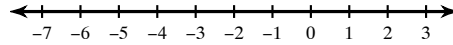
9) $k \geq 6$

10) $m > -2$

Write an inequality for each graph.

11)

12)

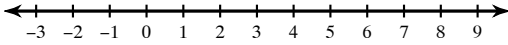**Solve each inequality and graph its solution.**

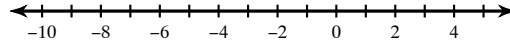13) $-11 + 6x \geq 6(7x - 7) - 5$

-3 -2 -1 0 1 2 3 4 5 6 7

14) $-32 + 8x \geq 8(5x + 8)$

-7 -6 -5 -4 -3 -2 -1 0 1 2 3

Solve each compound inequality and graph its solution.

15) $v - 10 \geq -5$ and $v + 6 < 12$

-3 -2 -1 0 1 2 3 4 5 6 7 8 9

16) $-6n < -12$ or $7n < -42$

-10 -8 -6 -4 -2 0 2 4

Use the relation {(4,6),(-2,5),(3,7),(-4,8),(0,5)} to answer questions below 18-20.

17) Find $f(3) =$

18) If $f(x) = 6$ what is x?

19) Is the relation a function?

20) Find the range of the relation.

Use the function f (x) = 3x + 5 to solve 21 - 22

21) Find $f(6)$

22) What is x when $f(x) = 20$

Find the slope of each line.

23) $y = -2$

24) $y = -\dfrac{3}{5}x + 1$

25) $y = -\dfrac{1}{2}x + 3$

26) $y = -\dfrac{4}{3}x - 2$