Algebra 1 Name_____

EOC Review #1

Date_____ Period____

Solve each equation.

1) $5k + k = 6$

2) $3 = 4 + p - 1$

3) $-5 = 2n - 5 - 2n$

4) $5 - 4(-2x - 3) = 57$

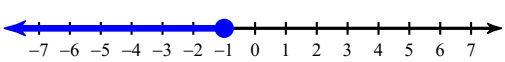
5) $56 = 2(-5n + 4) - 2$

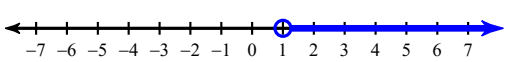
6) $-52 = -4(1 - 3n)$

7) $5(-4v + 5) = -20 - 5v$

8) $-7 + 2r = 2(r - 4)$

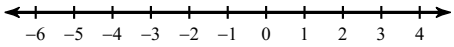
Write an inequality for each graph.

9) 

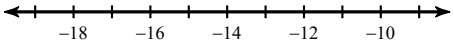
10) 

Solve each inequality and graph its solution.

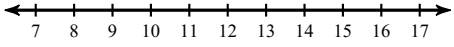
11) $x - 4 < -8$



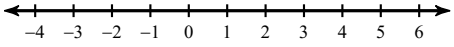
12) $x + 15 \geq 3$



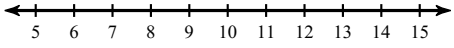
13) $31 \geq 18 + a$



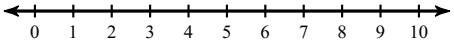
14) $-5b + 3 + 6 < -1$



15) $4 + 6m - 6m \leq 8$



16) $78 > 6x - 3(-5 - 5x)$



Solve each equation.

17) $|10r| = 50$

18) $2 + |x + 5| = 4$

19) $\left|\frac{r}{4}\right| + 1 = 3$

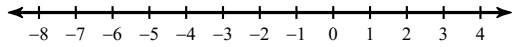
20) $-5|v + 4| + 5 = 10$

21) $6|3 + k| - 1 = 11$

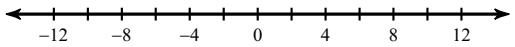
22) $-6 + 2|4x| = 18$

Solve each inequality and graph its solution.

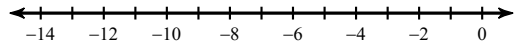
23) $|b| \leq 2$



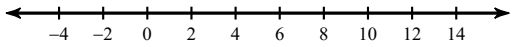
24) $|6p| > 48$



25) $|p + 8| + 2 \geq 5$



26) $|k - 4| + 5 \geq 11$



Give the domain and range of each relation. Tell whether the relation is a function.

27) (-1, 2), (0, 3), (0, 4), (1, 4)

28) (-4, 0), (-3, 1), (-2, 2), (-1, 3)

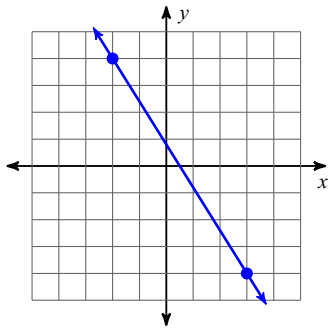
Evaluate each function for the given input values.

29) For f(x) = $3x + 1$, find f(x) when x = 2.

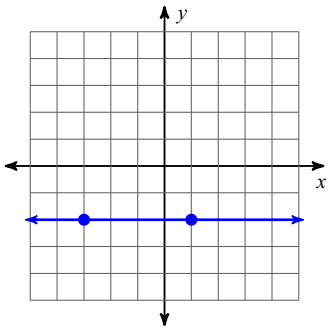
30) For f(x) = $x^2 + 3x - 7$, find f(x) when x = 4.

Find the slope of each line.

31)



32)



Find the slope of the line through each pair of points.

33) $(-14, -18), (-16, 6)$

34) $(-14, 12), (0, -3)$

35) $(11, 16), (9, 2)$

36) $(1, 18), (1, -6)$

Find the slope of a line parallel to each given line.

37) $x + 3y = -6$

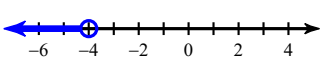
38) $x + y = 3$

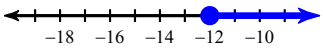
Find the slope of a line perpendicular to each given line.

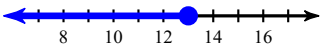
39) $2x + y = 5$

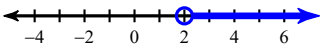
40) $2x - 3y = 6$

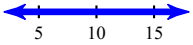
Answers to EOC Review #1

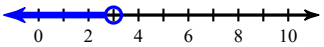
1) $\{1\}$
2) $\{0\}$
3) { All real numbers. }
4) $\{5\}$
5) $\{-5\}$
6) $\{-4\}$
7) $\{3\}$
8) No solution.
9) $a \le -1$
10) $v > 1$
11) $x < -4$:


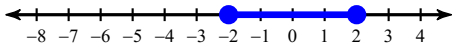
12) $x \ge -12$:


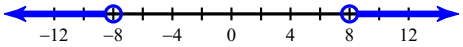
13) $a \le 13$:


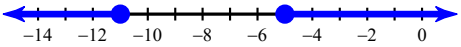
14) $b > 2$:


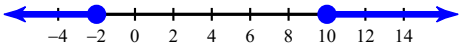
15) { All real numbers. } :


16) $x < 3$:


17) $\{5, -5\}$
18) $\{-3, -7\}$
19) $\{8, -8\}$
20) No solution.
21) $\{-1, -5\}$
22) $\{3, -3\}$
23) $-2 \le b \le 2$:


24) $p > 8$ or $p < -8$:


25) $p \ge -5$ or $p \le -11$:


26) $k \ge 10$ or $k \le -2$:


27) D: {-1, 0, 1} R: {2, 3, 4} / Not a function
28) D: {-4, -3, -2, -1} R: {0, 1, 2, 3} / Yes a function
29) 7
30) 21
31) $-\frac{8}{5}$
32) 0
33) −12
34) $-\frac{15}{14}$
35) 7
36) Undefined
37) $-\frac{1}{3}$
38) −1
39) $\frac{1}{2}$
40) $-\frac{3}{2}$