A1-4

Topics 1-2

## Algebra 2: Review Worksheet A

**Benchmark Test #1** 

A1-4 1) Solve for n.

1) Solve for n. 
$$4n + 3(n - 5) = 8$$

A1-5 2) Solve for b.

3) Which element is in the solution set for the inequality 
$$5c + 18 < 2c - 6$$
?

A) -8

B) -7 C) -9

D) 10

A1-4 4) Solve for x. 
$$-\frac{1}{3}x-9>6$$

A2-1 5) Solve for x. |4x-11| = 9

A2-1 6) What is the complete solution set to the equation 
$$-4 + 2^{|x+1|} = 20$$
?

 $x^{3}b + 6b = -7$ 

A2-1 7) Solve for x.  $|3-2x| \ge 7$ 

A2-1 8) Write the sentence which describes the solution to the inequality 
$$\frac{|x-6|}{3} > 5$$
.

A2-1 9) Find the solution set to the inequality  $\left|\frac{3x-1}{4}\right| \le 2$ .

A2-1 10) Sketch the interval in the real number line that is the solution for  $|x-3| \ge 5$ .

A1-6 11) Write the equation of the horizontal line which passes through the point (3, -2).

A1-8 12) Write an equation that represents a line that is parallel to  $y = \frac{2}{3}x - 5$ 

A1-6 13) What is the x-intercept of the line 3x - 5y = -30?

A1-6 14) Find the slope of the line 4x - 7y = 3.

A1-7 15) What is the equation of the line that has a slope of -2 and passes through the point (4, -5)? Write your answer in slope-intercept form.

A1-7 16) Write the equation of a line which passes through the points (1, -6) and (4, -2). Write your answer in slope-intercept form.

A1-8 17) Write the equation of the line that passes through (-8, 7) and is perpendicular to the line y = 4x-5. Write your answer in slope-intercept form.

A1-6 18) Graph the line 9x - 4y = 36.

A1-6 19) Graph the inequality -6x + 3y < 9.

A1-6 20) Sketch the line graph of  $y = -\frac{1}{4}x + 3$