

Math095 Basic Algebra – Spring 2009 – Arrowsmith – Test 4

Name _____

Each of the 18 questions is worth 5 points plus 1 point for each of 10 homework problems for a total of 100 points

Decide whether or not the ordered pair is a solution to the equation.

1) $-10x + 2y = -56$; $(5, -3)$

Complete the table of values. Write the results as ordered pairs.

2) $7x + y = -6$

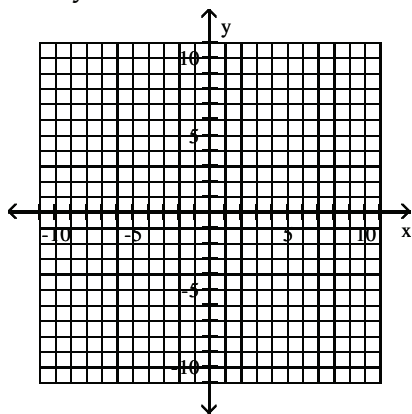
<u>x</u>	<u>y</u>
-2	
0	
1	

Find the intercepts for the graph of the equation.

3) $-5x + y = 10$

Graph the linear equation.

4) $2x - y = -6$



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

5) $(-3, 2)$ and $(-8, 8)$

Find the slope of the line.

6) $4x + 5y = 23$

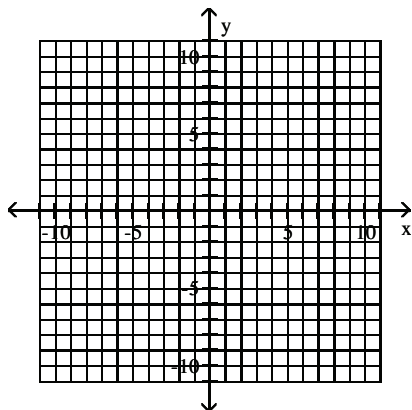
Write the equation of the line with the given slope and y -intercept.

7) slope $\frac{9}{5}$;

y-intercept (0, -7)

Graph the line through the given point with the given slope.

8) (-6, -10), $m = 2$



Find the square root.

9) $-\sqrt{\frac{484}{49}}$

Find the root.

10) $\sqrt[3]{-216}$

Simplify the radical.

11) $\sqrt{490}$

Simplify the radical. Assume that all variables represent nonnegative real numbers.

12) $\sqrt{196m^2n^6}$

Simplify and add or subtract wherever possible.

13) $7\sqrt{72} + 3\sqrt{32} + 4\sqrt{200}$

Perform the indicated operation. Assume that all variables represent nonnegative real numbers.

14) $\sqrt{6x} + 4\sqrt{216x} + 6\sqrt{24x}$

Rationalize the denominator.

15) $\sqrt{\frac{5}{3}}$

16) $\frac{-9}{\sqrt{175}}$

Simplify the expression.

17) $(2\sqrt{7} + 5\sqrt{5})(4\sqrt{7} + 4\sqrt{5})$

Write the quotient in lowest terms.

18) $\frac{72 - 90\sqrt{162}}{45}$