

Algebra Review #24 SHOW HOW YOU SOLVED EACH PROBLEM

1. Evaluate the following:
If $x = -2$ and $y = -5$,

$$\frac{4x^2 + xy - 2}{y - x}$$

2. If $f(x) = 5x^2 - x + 7$ and the domain is $\{-3, 0, 1, 3\}$ what is the range?

3. List each property shown below:

Step	Reason
$6(4x - 1) = 3(x - 7)$	Given
$24x - 6 = 3x - 21$	
$21x - 6 = -21$	
$21x = -15$	
$x = -5/7$	

NAME _____

4. Write the equation of a line that passes through $(3, -5)$ and $(-1, -5)$ in slope-intercept form.

5. Find the slope and the y-intercept from the following equation (remember, the equation must be in $y=mx+b$ form).

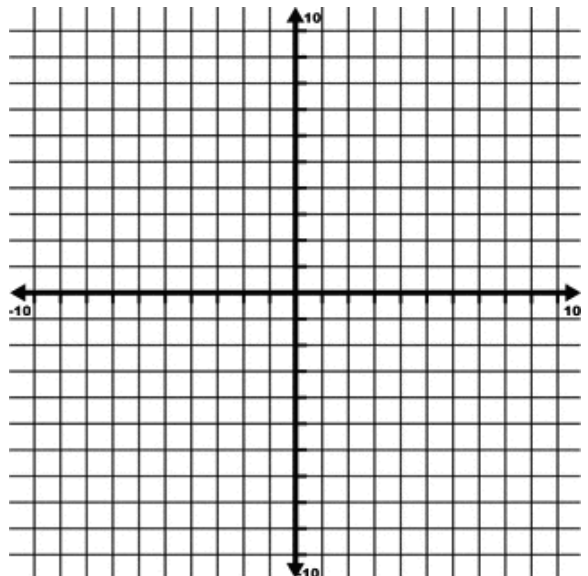
$$-3x - 12y = 24$$

Slope: _____ Y-intercept: _____

6. Draw a graph of the equation

$$y = -\frac{2}{3}x + 2$$

What is the slope? What is the y-intercept?



7. What is the value of the following:

$$-4\sqrt{20} + 2\sqrt{45}$$

8. What is the value of the following:

$$\sqrt{98} \cdot -2\sqrt{50}$$

9. Solve for x:

What is the solution to the following equation?

$$\frac{2}{3}(6x - 3) = 4x$$

10. Solve for r.

$$4 = \frac{1}{3}\pi x r$$