

Algebra Review #23 SHOW HOW YOU SOLVED EACH PROBLEM

1. Evaluate the following:
If $x = 8$ and $y = -5$,

$$2\sqrt[3]{8x} + |y|$$

2. The function below contains ordered pairs of the form (x, y) .

$$f = \{(-3, 4), (-4, -5), (-8, 2), (0, 2)\}$$

What is the domain of the function?

3. Ashley wrote these steps when solving an equation.

$$\begin{aligned} 6x + 3 &= 21 \\ \text{Step 1: } 6x &= 18 \\ \text{Step 2: } x &= 3 \end{aligned}$$

Which property justifies the work between Step 1 and Step 2?

4. Write the equation of a line that passes through $(-2, 5)$ and $(-1, 10)$ in point-slope form.

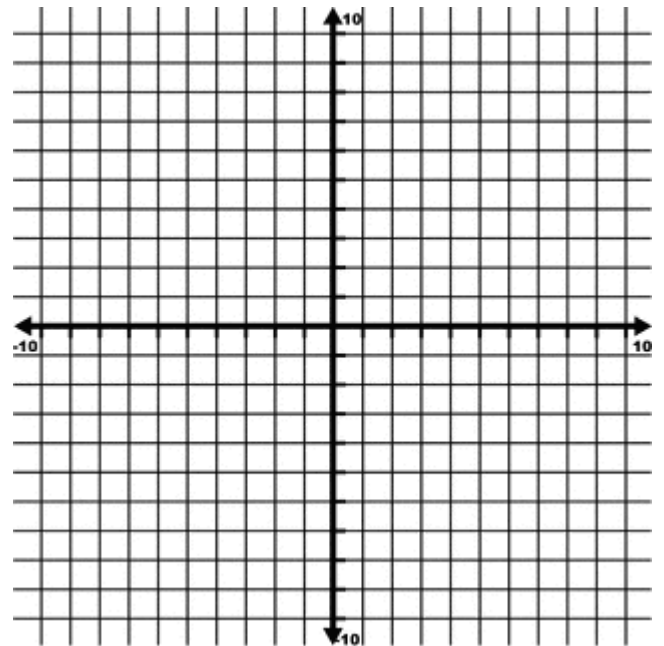
NAME _____

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

$$4x - 2y = 12$$

Slope: _____ Y-intercept: _____

6. Draw a graph of the equation
 $y = 7x$



What is the domain? What is the range?

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

7. What is the value of the following:

$$3\sqrt{64} - \sqrt{121}$$

8. What is the value of the following:

$$-\sqrt{14} \cdot 3\sqrt{28}$$

9. Solve for x:

What is the solution to the following equation?

$$\frac{-8x - 1}{3} + 1.5 = -9.5$$

10. Solve for y.

$$\frac{y - 2x}{x} = 12$$