

Take Home Quiz #10  
SHOW ALL WORK

DUE: \_\_\_\_\_

<p>1. Write an equation for the line whose slope is <math>-\frac{1}{5}</math> and whose y-intercept is 5.</p> <p style="text-align: right;">2</p>	<p>2. Give the equation of a line that is perpendicular to the line <math>y = -\frac{4}{5}x + 8</math></p> <p style="text-align: right;">2</p>
<p>3. Write an equation of the line whose slope = -2 and which passes through the point (5, 1) in <b>slope-intercept form</b>. <b>Show work</b></p> <p style="text-align: right;">3</p>	<p>4. If two lines are parallel and the slope of one of the lines is <math>p</math>, what is the product of their slopes?</p> <p>(A) 1 (B) <math>2p</math> (C) <math>p^2</math> (D) 0</p> <p style="text-align: right;">2</p>
<p>5. Which equation represents a line parallel to the graph of <math>2x - 4y = 16</math>? <b>Show work</b></p> <p>(A) <math>y = 2x + 8</math> (B) <math>y = \frac{1}{2}x - 5</math> (C) <math>y = -\frac{1}{2}x + 4</math> (D) <math>y = -2x + 6</math></p> <p style="text-align: right;">2</p>	<p>6. What are the coordinates of the y-intercept for the equation <math>y + 3x = 6</math>? <b>Show work</b></p> <p>(A) (0,3) (B) (0,-3) (C) (0,6) (D) (0,-6)</p> <p style="text-align: right;">2</p>
<p>7. If the point (d, 4) lies on the graph of <math>2x - y = 8</math>, find the value of d. <b>Show work</b></p> <p style="text-align: right;">3</p>	<p>8. Which is the equation of a line whose slope is undefined?</p> <p>(A) <math>2x + 3y = 0</math> (B) <math>y = 2</math> (C) <math>x = -3</math> (D) <math>x = 4y</math></p> <p style="text-align: right;">2</p>

9. When solving the equation  $3(2x+6)+8=15$ , Rose wrote  $3(2x+6)=7$  as her 1st step. Name the property she used.

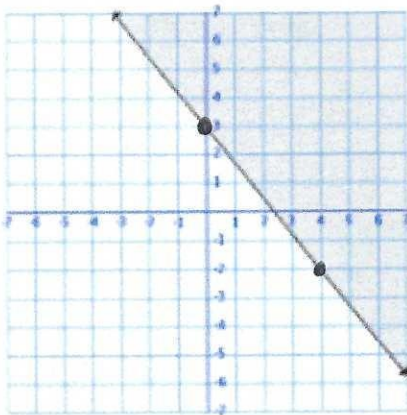
Property: \_\_\_\_\_

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11. Given the function  $f(x) = 3x + 1$  with the domain  $1 \leq x \leq 3$ , what is the range of this function?

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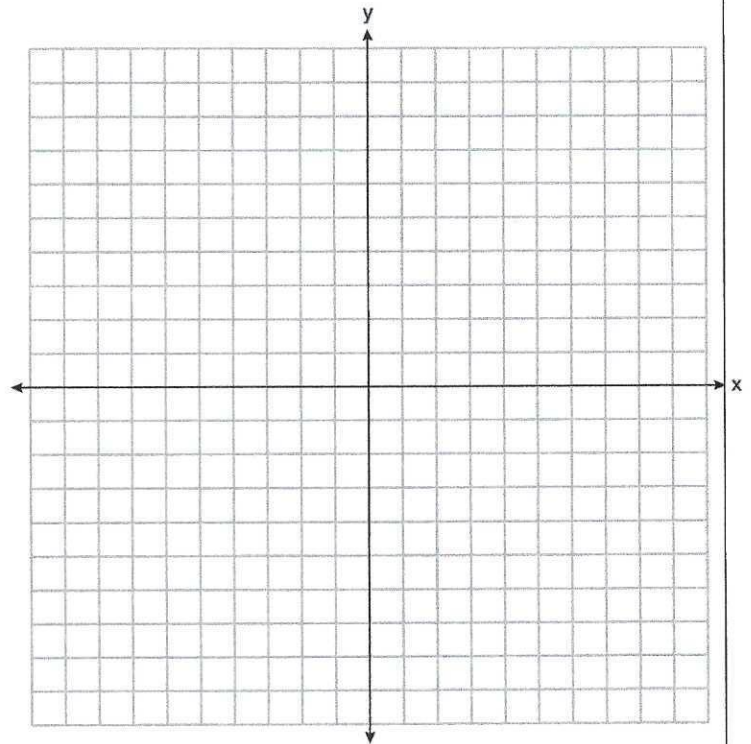
12. Give the inequality that is represented by the graph. Show supportive work!



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10. Given the set of axes, graph the following system of inequalities and label the solution set S.

$y \geq -3x + 1$  and  $y < x - 3$



Is (1,-2) a solution to the system? Explain.

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13. Give the domain and range of the following relation. Tell whether the relation is a function. Explain why or why not.

X	Y
7	5
5	3
3	5
2	6

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

Function: (yes or no) \_\_\_\_\_

Reason: \_\_\_\_\_

\_\_\_\_\_

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