

Name: \_\_\_\_\_

Block: \_\_\_\_\_

Quiz: Unit1. Review.  
Arithmetic, PEMDAS, Lines  
Group A.



There are 10 questions in this quiz, each of equal value.

Standard time for the test is 15 minutes.

No calculator is allowed. (accommodation excepted)

\*\*\*\*\* Since this is a PRACTICE, you actually have 20 questions.\*\*\*\*\*

<p>1. <math>\frac{7}{4} - \frac{4}{7} =</math></p> <p>Answer: _____</p>	<p>2. <math>\frac{7}{4} \div \frac{4}{7} =</math></p> <p>Answer: _____</p>
<p>3. <math>\frac{5}{8} \cdot \frac{4}{7x} \cdot \frac{8}{5} \cdot 2x =</math></p> <p>Answer: _____</p>	<p>4. Solve <math>(x - 3) \cdot \frac{1}{4} = \frac{1}{2} \cdot (12 - x)</math></p> <p>X= _____</p>
<p>5. Simplify: <math>(x - 3) \cdot (x + 2) - (x - 1) =</math></p> <p>Answer: _____</p>	<p>6. Simplify: <math>(5 - x) \cdot (5 + x) =</math></p> <p>Answer: _____</p>

7.  $\frac{2x+3}{4} - \frac{3x-4}{3} =$

8.  $\frac{3x}{4} \div \frac{9x-6}{8} =$

9.  $(2x^{-1})^2 \cdot \frac{3x^4}{(3x)^2} =$

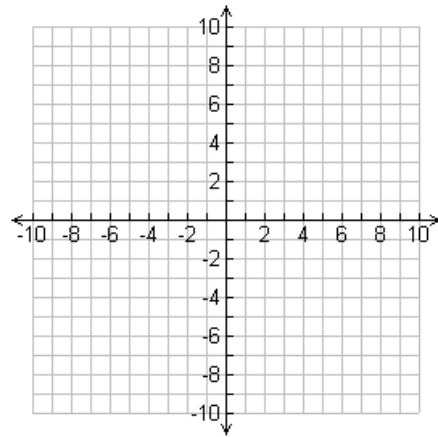
10.  $\frac{-3^2 \cdot x^4 \cdot y^{-2}}{2x^5 \cdot (y^3)^4} =$

11. Solve:  
 $9 - 4x + (2x - 2) = 10 + x$

12. Solve:  
 $\frac{6x+9}{3} - (2x + 2) = 4 - x$

13.

- (a) Plot the line going through the points:  
 $(-2, -4)$  ,  $(3, 1)$



- (b) Specify the coordinates of:

X intercept \_\_\_\_\_

Y intercept \_\_\_\_\_

- (c) Write the equation of the line in slope-intercept form:

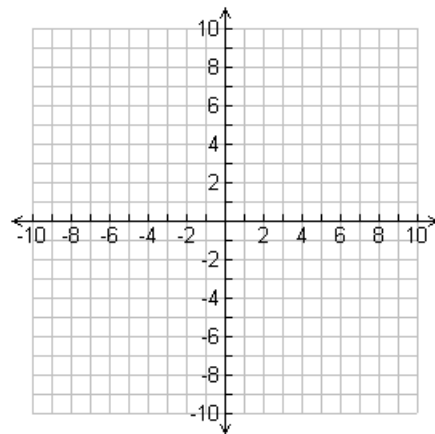
Answer: \_\_\_\_\_

- (d) Write the equation of the line in standard form:

Answer: \_\_\_\_\_

14.

- (a) Plot the line going through the point  
 $(2, 4)$  , and has a slope of  $-3$ .



- (b) Specify the coordinates of:

X intercept \_\_\_\_\_

Y intercept \_\_\_\_\_

- (c) Write the equation of the line in slope-intercept form:

Answer: \_\_\_\_\_

15.

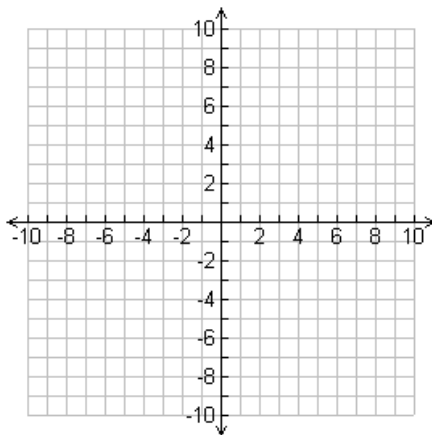
- (a) Find the line that goes through the point  $(0,5)$ , and is perpendicular to the line  $y = 2x$ .

Answer: \_\_\_\_\_

- (b) What is the intersection point of these two lines?

Answer: \_\_\_\_\_

- (c) Plot the two lines, and indicate the intersection point.



16. What is the slope of the line described by

$$3y + 2x = 5$$

m= \_\_\_\_\_

17. What is the slope of a line perpendicular to the line that goes through the two points  $(2,5)$  and  $(-1,3)$ ?

m= \_\_\_\_\_

18. Do the following two lines meet? If they do, what is the intersection point?

Line 1:  $3y + 2x = 5$

Line 2:  $6y = 5 - 4x$

Meeting= Yes / NO  
Intersection point= \_\_\_\_\_

19. Calculate the following absolute value expressions:

(a)  $|-7| =$

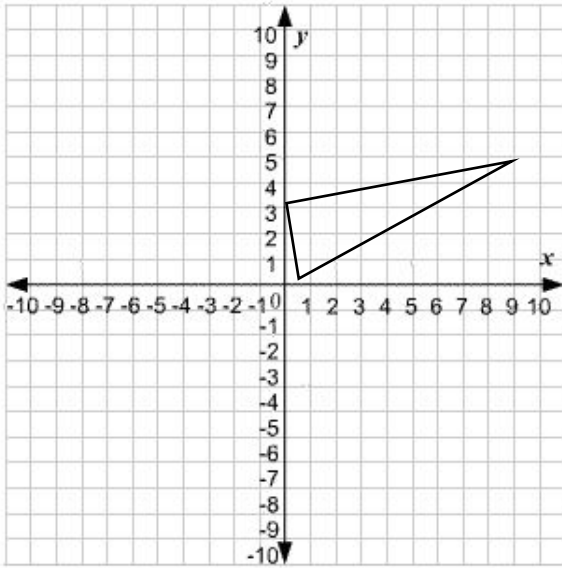
(b)  $|3| =$

(c)  $|3 - 7| =$

(d)  $3 - |7| =$

20. The picture below describes a right triangle. The 3 sides have slopes denoted as  $m_1, m_2, m_3$ .

What can you say about the value of the product  $(m_1 \cdot m_2 \cdot m_3)$  ? See 4 options below. Explain your answer.



- a)  $-\infty < (m_1 \cdot m_2 \cdot m_3) \leq -1$
- b)  $-1 \leq (m_1 \cdot m_2 \cdot m_3) \leq 0$
- c)  $0 \leq (m_1 \cdot m_2 \cdot m_3) \leq 1$
- d)  $1 \leq (m_1 \cdot m_2 \cdot m_3) < \infty$

=== End ===