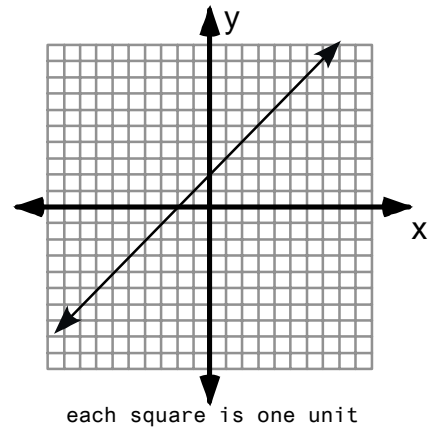


MTH070 Review Problems for Test 1 - MLC

This is not a sample test. These problems are designed to get you started on your review for the test. Study the homework from the textbook and your class notes for a more complete review.

Section 1.3

- Given the graph of the line at right:
 - Find y when $x = -5$
 - Find x when $y = 3$
 - What is the y -intercept of the line?
 - What is the x -intercept of the line?



- Create a scattergram of the ordered pairs listed in the table at right.
 - Are the points linearly related?
 - Draw a line that comes close to the points in your scattergram.

x	y
1	-5
3	-3
5	-1
7	1

Section 1.4

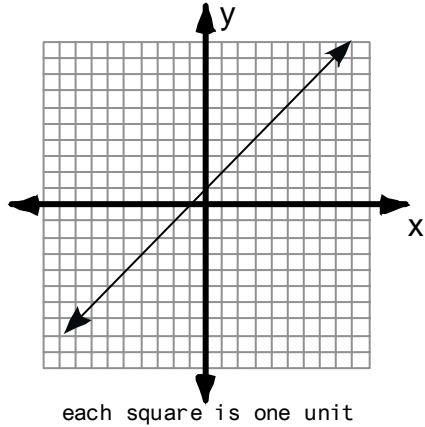
- Do problem # 14 on page 43 of your textbook.

Section 3.1

- Which of the ordered pairs satisfies the equation: $y = 2x + 5$
(1, 6), (2, 8), (0, 5), (6, 15)

5. Graph the equation $y = x + 3$. What is the y-intercept of the equation?

6. The graph of an equation is sketched below. Use the graph to complete the table at the right.



x	y
-3	
-1	
0	
2	
3	

Section 3.2

7. Do problem # 6 on page 127.

8. Do problem #20 on page 129.

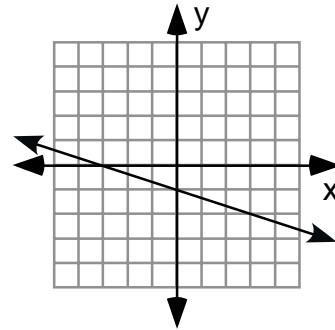
Section 3.3

9. What is the formula for calculating the slope of a line that goes through two points?

10. Use the slope formula to calculate the slope of the line that passes through the points.
 a) (2, 3) and (6, 5) b) (-2, 3) and (2, -3) c) (4, 5) and (3, 5) d) (6, 2) and (6, 4)

11. a) What is the slope of the line sketched at the right?

b) Is the line increasing or decreasing? Explain.



Section 3.4

12. Determine the slope and y-intercept of the line described by the equation $y = \frac{3}{5}x - 7$.

13. Graph the equation $y = -\frac{1}{3}x + 4$

14. Determine whether the pairs of lines are parallel, perpendicular, or neither. Show your work or use words to explain how you arrived at your answer.

a) $y = -\frac{1}{2}x + 1$
 $y = \frac{1}{2}x + 3$

b) $y = 3x + 5$
 $y = -\frac{1}{3}x + 2$

c) $y = \frac{3}{4}x + 6$
 $y = \frac{3}{4}x - 2$