Unit 6: Review
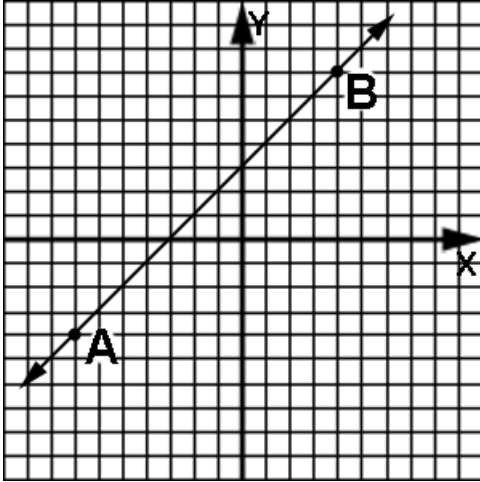
Use these two points and the line passing through them to work problems 1-11:

1. Using the points A and B, what is the exact slope of the line?

2. Using points A and B, what is the exact equation of the line?

3. Using the exact equation determined in problem 2, find f(-2).

4. Which quadrants does the line touch?

5. What is the y-intercept?

6. What is the equation of the horizontal line passing through point A?

7. What is the equation of the vertical line passing through point B?

8. Just from the appearance of the graph, what is an estimate for f(2.6)?	9. Just from the graph, when the value of the function is -2, what appears to be the corresponding value of *x*? -
10. Would the slope of a line drawn from the origin to point A have a positive or negative slope?	11. Would the slope of a line drawn from (8, 0) to point B have a positive or negative slope?

12. Given the following ordered pairs as solutions to a linear function, find the function rule:

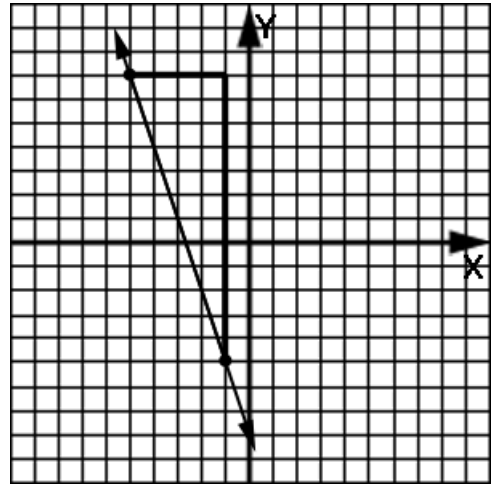| x	y
-2	0
0	8
2	16
6	32

13. Sketch and give the equation of a horizontal line through (4, 5).	14. What is the equation of the vertical line connecting (-7, 9) and (-7, -6)?

15. Identify the slope and y-intercept of the linear function given by -4y + 2x = 11.

16. Find the slope of the line passing through (1, 2) and (10, 5).

17. Find the slope of the line shown here.

18. After losing power an airplane is descending along a straight path. Radar shows that the plane is losing altitude at the rate of 20 feet for every 80 feet the plane's shadow moves on the ground. Make a drawing of this situation and then find the slope of the line describing the glide path of the airplane.