**Review for 2.1-2.4 Test – Alg II**

1. Find the x- and y-intercept for the equation 2x – 6y = 6. Graph the line.

2. Graph the given relation and determine the following: is it a function? If yes, is it a one-to-one

 function? { (4, 6), (-1, 6), (-3, 4), (-3, -2)}

3. Graph the given equation and determine the following: is it a function? If yes, is it a one-to-one

 function? y = 2x + 5

4. Find f(8) for f(x) = – 3x – 3. Now find g(-3) if g(x) = 7x2 – 21x.

5. Write an equation in slope-intercept form for the line that satisfies the following: passes through

 (24, -4) and is perpendicular to the line y = $\frac{2}{3}$x + 5.

6. Find f(-3) for f(x) = 7x – 4; find g(2) for g(x) = 6x – 2x3.

7. Write an equation in slope-intercept form that has a slope of 9 and passes through (2, 22).

8. Find the x- and y-intercept for the equation 7x + 3y = -21. Then graph the line.

9. Find the slope of the line that passes through (2, -5) and (-3, 8).

10. Write the equation 7y = 3x – 5 in standard form.

11. Write an equation in slope-intercept form that passes through (11, -3) and is parallel to the line

 y = 3x – 4.

12. Find the slope of the line that passes through (3, 20) and (12, 8). Now write an equation in

 slope-intercept form for that line.

13. Write an equation in point-slope form for a line that passes through (2,5) and (-3, -8).

14. Is 8x2 – 5y = 11 a linear function?

15. Write an equation in slope-intercept form that passes through (3, 14) and is parallel to a line that

 passes through (10, 2) and (25, 17).

16. Is f(x) = 5xy + 3 a linear function?

17. Write 2y = 1 – 5x in standard form.

18. State the point and the slope of the line given by the equation y – 3 = 2(x + 4).

19. Find the rate of change.

20. Find the rate of change between hour 1 and hour 5.