Math 1 Spring Final Review B Name_____

Writing and Evaluating Equations + Exponential Equations

Period____

Find the slope of the line through each pair of points.

1) $(3, -14), (-15, -10)$

2) $(10, -15), (5, -17)$

Write the point-slope form of the equation of the line through the given point with the given slope.

3) through: $(-2, 1)$, slope = 3

4) through: $(-2, -5)$, slope = $\frac{1}{2}$

Write the point-slope form of the equation of the line described.

5) through: $(-3, 4)$, parallel to $y = -\frac{2}{3}x - 1$

6) through: $(-5, -5)$, perp. to $y = -\frac{1}{4}x + 5$

Write the slope-intercept form of the equation of each line.

7) $3x - 8y = -48$

8) $7x + 3y = 12$

Write the slope-intercept form of the equation of the line through the given points.

9) through: $(0, -2)$ and $(-1, -4)$

10) through: $(0, -3)$ and $(-3, 4)$

Find the x and y intercepts.

11) $2x + 3y = 6$

12) $2x - 5y = -20$

Evaluate each function for the given value.

13) $f(x) = 4x - 6$; Find $f(2)$

14) $f(x) = 4x + 4$; Find $f(-3)$

Evaluate the exponential growth or decay function to find an approximate value after t years.

15) A savings account balance is compounded annually. If the interest rate is 3% per year and the current balance is $1,780.00, what will the balance be 8 years from now?

16) A savings account balance is compounded annually. If the interest rate is 4% per year and the current balance is $1,890.00, what will the balance be 10 years from now?

Evaluate the exponential function for x= -2, -1, 0, 1, and 2. Sketch the graph of the function.

17) $y = 3^x$