Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Review of linear equations/functions**

1. What is the rate of change for this linear function {(0, 3), (1, 6), (2, 9), (3, 12)}?
2. Graph: a) y = – 3x - 5 (use rise/run and y-intercept)

 b) 3x + 6y= 36 (use x-intercept and y-intercept)

1. Find the slope of the lines passing through the points:

 a) (6, 2) and (-2, -3)

 b) (-7, 4) and (0, -10)

1. Find the equation of the lines:

 a) ![[image]]() b) ![[image]]()

1. Cyndi is starting a business tutoring students in math. She rents an office for $400 per month and charges $50 per hour per student.  If she has 15 students for one hour per week, how much profit does she make in a month? (assume 4 weeks per month)
2. Find the slope and *y*-intercept of the line represented by each equation:

 *y* = 6*x* + 3 slope \_\_\_\_\_\_\_\_ *y*-intercept \_\_\_\_\_\_\_

 *y* = 7 – 9*x* slope \_\_\_\_\_\_\_\_ *y*-intercept \_\_\_\_\_\_\_

1. At noon, the temperature is 30° F.

For the next several hours, the temperature falls by an average of 3° F an hour.

 What is the rate of change and initial value?

Write an equation for the temperature *T*, *n* hours after noon.

1. Transform the equation 33 + 9x = 11y in

a) slope-intercept form

b) standard form