An ELE Math final (It’s funner than Disney)

1. What is a function?
2. How does a function appear on a graph?
3. How do you identify a function from a list of coordinates?

**4)** Find the intercepts and graph:

-6x+10y=30

8x-4y=24

**5)** Mr. Griffith buys green mangos for 4 cents each (X) and 10 cents per ripe mango (y). Write a standard form equation if you want to earn $2 (200 cents)

Graph your equation. What are the intercepts? What do they mean?

Give two examples of green mango/ripe mango combinations that will earn you $1 (don’t give intercepts)

**6)** Write the equation for the line with the given points in slope-intercept form.

(2,5) (0,3)

(5,-1) (-6, -8)

(1, -7) (-1, 2)

**7)** Parallel and perpendicular:

Write the equation of the line that is parallel to y=1/2+3 and passes through the point (-2, -2).

Write the equation of the line that is perpendicular to y=1/2+3 and passes through the point (1, -4)

**8)** Solve by Substitution:

3x - y=2, 2x + 2y=12

Y= -6x + 1, 4x - 2y= -2

**9)** Solve by elimination:

Y= -4x + 5, Y= -5x + 8

2X – y = 12, -2X + 3y = -2

**10)** Describe each of the following solutions. If there is one solution, state the solution

4x-5y=12, 5y=4x-12

Y=-7x=3, 21x+3y = 9

6x-y=4, -12+2y=12

**11)** Disneyland has 25 rides. Some rides cost 2 tickets(x) and some rides cost 3 tickets (y). It costs 60 tickets to visit all the rides. How many of each type of rides are there? You must use systems of equations to get credit for the answer. What are the most tickets used if you visit 12 rides?

**12)** Solve by graphing



**13)** The perimeter of a room must be less than 20 feet. The width must be at least 6 feet. Graph all possible combinations of the room’s length and width. Identify 2 possible solutions.

Extra Credit:

Why would you learn math from an English teacher?