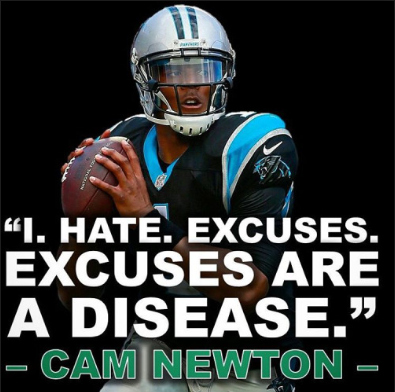
**Name Job 8 Function Notation**

**Part 1: Textbook**

Textbook Lesson 3 - 2 Page 100: 13, 15, 19, 20, 22, 30a

**Part 2: Algebra Regents Questions –**

1. Find the value of for the function . Show all work.

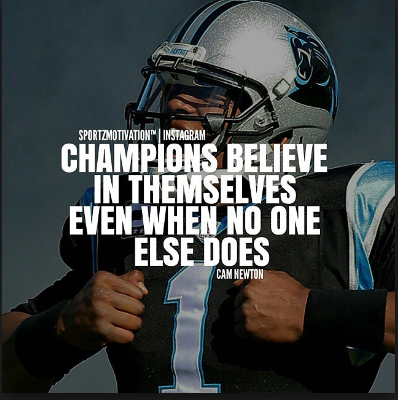
**2.** Solve for y and graph the equation:

a) State the rate of change

b) State the y - intercept

**3.** The cost of a pack of chewing gum in a vending machine is $0.75. The cost of a bottle of juice in the same machine is $1.25. Julia has $22.00 to spend on chewing gum and bottles of juice for her team and she must buy seven packs of chewing gum. If *b* represents the number of bottles of juice, which inequality represents the maximum number of bottles she can buy?

1. (3)
2. (4)

****

**4.** For which value of and is a rational number?

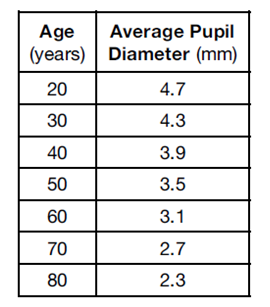
(2)

(3)

(4)

**5.** The owner of a small computer repair business has one employee, who is paid an hourly rate of $22. The owner estimates his weekly profit using the function . In this function, represents the number of

(1) computers repaired per week

 (2) hours worked per week

(3) customers served per week

(4) days worked per week

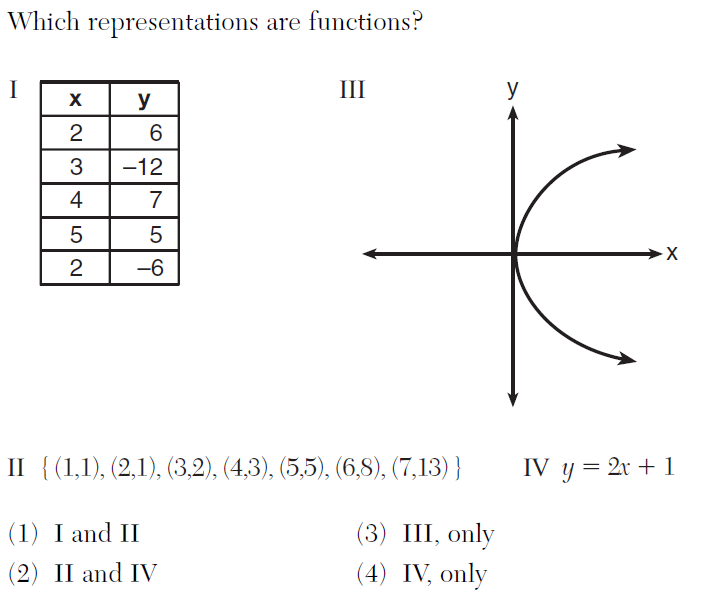
**6.** The table to the right shows the average diameter of a pupil in a person’s eye as he or she grows older. What is the average rate of change, in millimeters per year, of a person’s pupil diameter from age 20 to 80?

(1) (2) (3) (4)

7. If and , find each value.

1. b)

8.



9. Myasia wants to rent a community recreation center. They charge a fixed fee of $55 plus $175 per hour to rent their facilities.

1. Write an equation that shows the total cost, *c* of renting the recreation center for *h* hours.

b) Determine the total cost for Myasia to rent the recreation center for 5 hours.