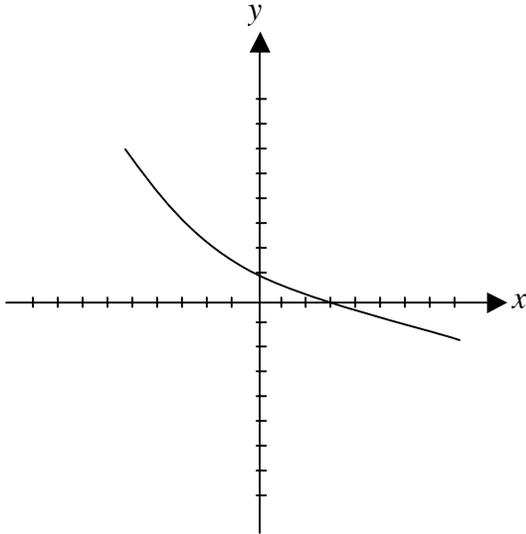


Name: \_\_\_\_\_

Place your answer in the spaces provided. You must show your work to receive credit.

(6 pts) 1. Find the range of this function.



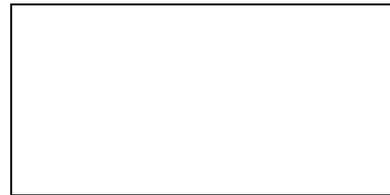
(8 pts) 2 Let  $g(x) = \frac{2x+5}{x-4}$  Find  $g(x+1)$ .
(8 pts) 3. The weight, in pounds, of the average male baby is given by the function  $W(t) = 1.2t + 7.5$  where  $t$  is the age in months.

(4 pts) (a) What does the number 7.5 signify? (Write your answer as a complete sentence.)

(4 pts) (b) What does the number 1.2 signify? (Write your answer as a complete sentence.)

Name: \_\_\_\_\_

Place your answer in the spaces provided. You must show your work to receive credit.

(6 pts) 4. Find the  $x$ -intercept for  $3x + 12 = 4y$ .(8 pts) 5. Find the slope-intercept form of the line that contains the point  $(2, 6)$  and has slope  $m = \frac{1}{3}$ .

(12 pts) 6. Lauren's cell phone bill was \$25.00 for a month in which she used 30 minutes of airtime. The bill was \$35.00 when she used 50 minutes.

(8 pts) (a) Find a linear function that expresses the monthly cost as a function of the number of minutes. (Name the variables and write the function.)



(4 pts) (b) Use your function from part (a) to determine the monthly cost when 45 minutes of airtime are used.



Name: \_\_\_\_\_

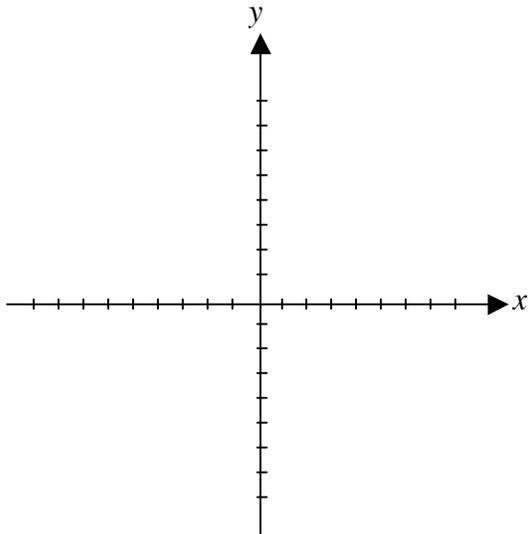
Place your answer in the spaces provided. You must show your work to receive credit.

(10 pts) 7. Let  $f(x) = x^2 + 1$  and  $g(x) = 2x - 5$ .(5 pts) (a) Find  $f\left(\frac{1}{2}\right) / g\left(\frac{1}{2}\right)$ .
(5 pts) (b) Find  $(f + g)(3)$ .

(12 pts) 8. Graph the following equations. Use your graphs to find the solution of the system. Write your solution in the form of an ordered pair(s).

$$y = -3$$

$$x + y = 4$$



Name: \_\_\_\_\_

Place your answer in the spaces provided. You must show your work to receive credit.

(8 pts) **9.** Find the slope of any line perpendicular to  $8y - 2x = 5$ .



(10 pts) **10.** Solve using the substitution method. Express your answer as an ordered pair.

$$a = 4b + 1$$

$$3a + 2b = 10$$



(12 pts) **11.** On Saturday night, 480 people attended the senior class play. Tickets were \$3 for the general public and \$2 for students. If \$1140 was taken in by the box office that night, how many of each kind of ticket were sold? (Name the variables, set up equation(s), and solve.)

