MA 103   KATIRAIE   QUIZ #3 Form B   SECTIONS (3.1, 3.2, 3.3)   FALL 2007

NAME _____   SCORE: _____/ 20
*** RETAIN ALL GRADED PAPERS FOR YOUR RECORDS ***

1)   Solve the following algebraically   (2 Points Each)
(please give your answers in interval notation)

a) $\dfrac{3-5x}{2} \le \dfrac{1}{5}x + 3$

b) $-\dfrac{5}{3}x + \dfrac{1}{2} \le 2$

c) $3.5(3-2x) \le -2.9x$

d) $-\dfrac{5}{9}x + \dfrac{1}{3} \le 2$

2)   Solve the following equations:

a. $\dfrac{3x}{4} - \dfrac{2x}{3} = \dfrac{1}{6}$

b. $\dfrac{3x+1}{5} = \dfrac{2x-1}{5}$

2) In 1992 a bus company had 30 busses; in 1995 the company had 345 busses. Let f(x) represents the number of busses. Assume f(x) is a linear function. (2 Points Each)

a. Find the slope of f(x), and state what the slope represents in terms of the story?

b. Use your slope and one ordered pair to write the equation for f(x).

c. Predict the number of busses in the year 2007.

d. Determine the year when number of busses will be 1920.