

MONTGOMERY COLLEGE
Department of Mathematics
Rockville Campus

MA 103 KATIRAIE QUIZ #3 Form A 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) $\frac{3-5x}{5} \leq \frac{1}{2}x+7$

b) $-\frac{5}{2}x + \frac{1}{3} \leq 2$

c) $3.1(3-2x) \leq -2.9x$

d) $-\frac{5}{4}x + \frac{1}{2} \leq 2$

2) Solve the following equations:

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

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

- 2) In 1990 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 1227.