MONTGOMERY COLLEGE Department of Mathematics Rockville Campus

MA 103 KATIRAIE QUIZ #3 Form A SECTIONS (2.4, 3.1, 3.2) Spring 2007

NAME	SCORE:/ 20
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1. Find the slope - intercept form of a line perpendicular to -2y-3x=1, passing through (- 4,- 3)

2. Find the slope - intercept form of a line parallel to $y = \frac{-1}{8}x + 7 \text{ , passing through (-64,-4)}$

- 3. In 1999 Toyota sold 1.7 million vehicles. This number increased to 2 million in 2004.
- a) Find a linear function that models the data.

- b) Determine the year when Toyota sold 2.1 million vehicles by solving a linear equation.
- c) Predict the year when Toyota may sell 2.5 million vehicles.
- 4. The length of a rectangular room is 4 feet more than its width. If the perimeter of the room is 105 feet, find the width and length of the room.

5. Solve the following equations:

a.
$$\frac{3x}{5} - \frac{2x}{4} = \frac{1}{6}$$

b.
$$\frac{3x+1}{7} = \frac{2x-1}{2}$$