

MONTGOMERY COLLEGE
Department of Mathematics
Rockville Campus

MA 103 KATIRAIE QUIZ #3 Form B SECTIONS (2.4, 3.1, 3.2) FALL 2006

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

2. Find the slope - intercept form of a line perpendicular to $y=\frac{-1}{2}x+1$, passing through $(-3, -4)$

3. In 1998 Toyota sold 1.4 million vehicles. This number increased to 1.8 million in 2002.

a) Find a linear function that models the data.

b) Determine the year when Toyota sold 1.7 million vehicles by solving a linear equation.

c) Predict the year when Toyota may sell 2 million vehicles.

4. The length of a rectangular room is 2 feet more than its width. If the perimeter of the room is 80 feet, find the width and length of the room.

5. Solve the following equations:

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

b. $\frac{3x+1}{4} = \frac{2x-1}{3}$