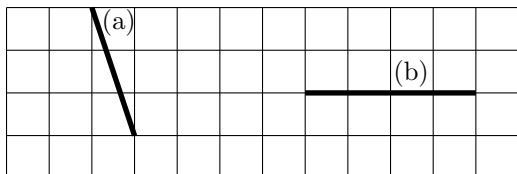


Math 102 Quiz 3
January 27, 2012

name _____

Instructions: Show all your work, and draw a box around your final answer.

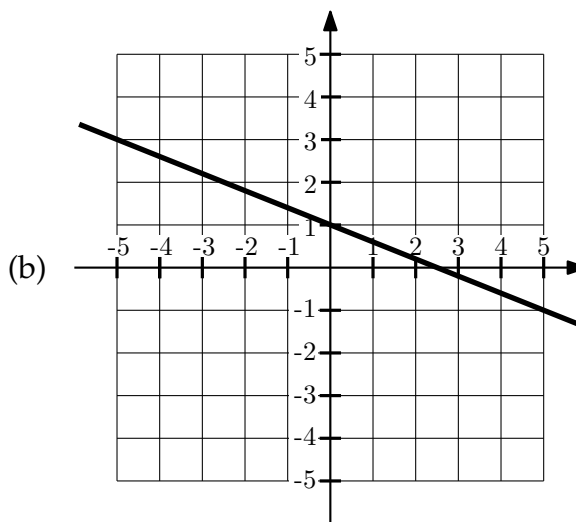
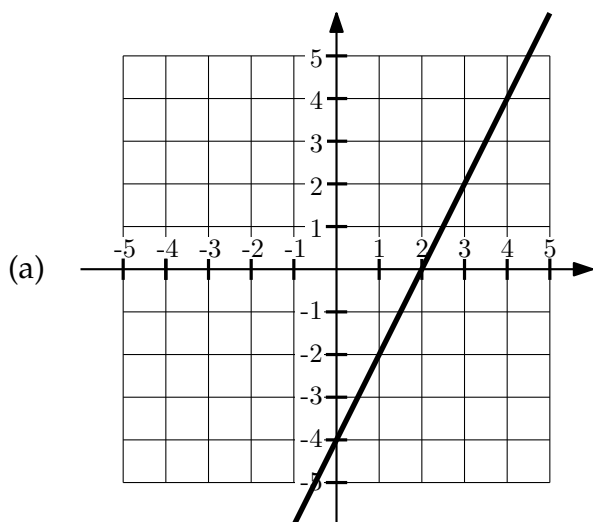
1. (10 pts) Find the slopes of these line segments:



Slope of (a): _____

Slope of (b): _____

2. (40 pts) Find the slope and y -intercept for each of the following lines:



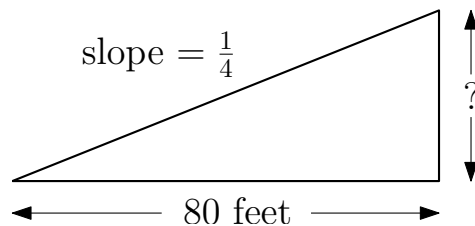
(c) $5y = -x - 5$

(d) $2x + 3y = 0$

3. (25 pts) Are the lines $2x + y = 4$ and $-x + 2y = 0$ parallel, perpendicular, or neither?

Circle one: parallel perpendicular neither

4. (25 pts) The steepest city block in Seattle has a slope of $\frac{1}{4}$, approximately. If the block is 80 feet long, what is the change in height (Δy)?



Extra credit (10 pts) For what value of r will this system of equations have no solution?

$$\begin{cases} 2x - ry = 3 \\ -3x - 4y = 2 \end{cases}$$