

Math 172-Quiz # 3

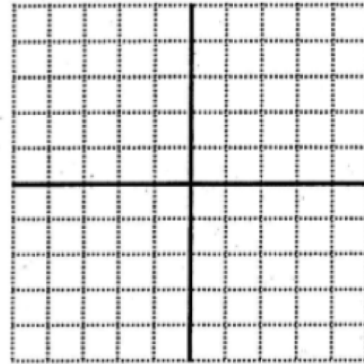
November 1, 2013

Instructors: Pat Wrean & Leah Howard

Name: _____

Total: 35 Points

1. [5 points] Find the slope and the y -intercept of the line $3x - 2y = 4$ and use these to graph the line.

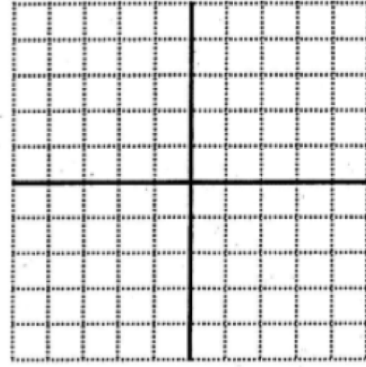


slope: _____

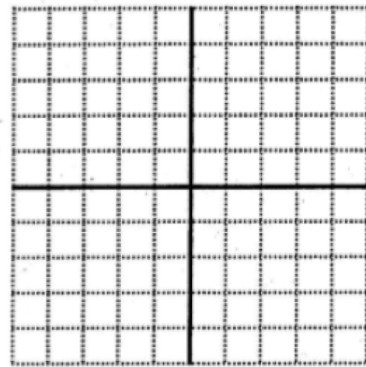
y -intercept: _____

2. [5 points] Find the equation of the line l_1 through the point $(-2, 4)$ which is perpendicular to the line l_2 through the points $(7, 2)$ and $(5, 8)$. Write the equation in standard form with integral coefficients, and also in slope-intercept form.

3. [4 points] Graph the inequality $3x - 5y > 15$



4. [5 points] Graph the compound inequality $-x \leq 2$ and $2x - 4y < 8$



5. [8 points] Find the solution set for each system of equations. You may use any method, but show all your work. Indicate whether the system is independent, dependent or inconsistent.

a) $3x + 5y = 1$

$4x - 2y = 10$

b) $\frac{1}{3}x + \frac{1}{12}y = -2$

$0.4x + 0.1y = 1$

6. [2 points] What are the slopes of the following lines?
(No explanation required).

$$y = -7$$

$$x = 11$$

7. [6 points] Albert's change jar contains 27 coins consisting of nickels, dimes and quarters. The nickels and dimes together are worth \$1.25. The dimes and quarters together are worth \$3.30. How many of each type of coin are in the change jar?