

MTH 60, Fall Term 2010
Final Exam – No Calculator Portion
Given December 8, 2010

Name _____

Please read all directions carefully – your test score will be probably decrease if you fail to read and follow directions.

1. Consider the line with equation $3x + 2y = 3$.
 - a. State the slope and y -intercept of the line after first writing the equation of the line in slope-intercept form. (7 points)
 - b. Carefully graph the line on Figure 1. Make sure that you start with a point where both coordinates are integers! (4 points)

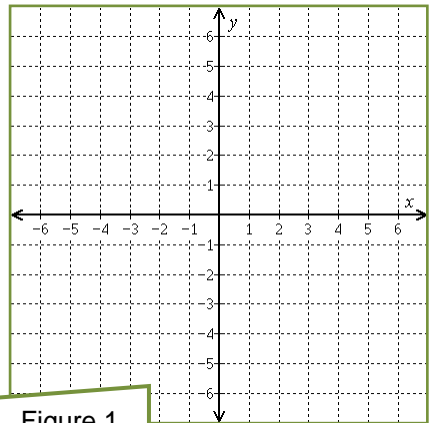


Figure 1

2. Graph the solution to $5x - y < -7$ on Figure 2. (5 points)

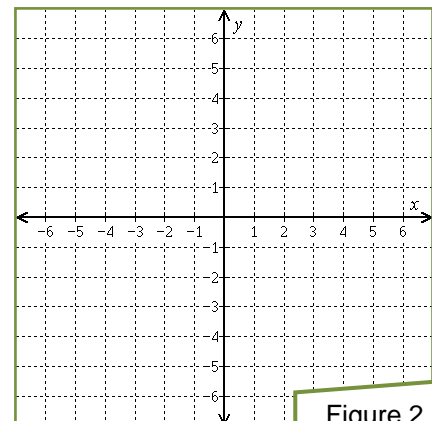


Figure 2

3. Solve each equation and state the solutions using complete sentences. (7 points each)

a. $2(x + 4) = 4x + 5 - 2x + 3$

b. $100 = 4(x - 6) - (x - 1)$

4. Solve $S = P + Prt$ for r . (5 points)

5. Completely simplify $2(3x^2 - 5) - [4(2x^2 - 1) + 3]$. Make sure that your work is presented in the manner we discussed in class. (5 points)

6. Write the requested bit of information in each provided box.; do any necessary figuring on your scratch paper (which will not be collected or graded). (2 points each)

a.	What is the y -intercept of the line with equation $y = \frac{3}{2}x$?	
b.	What is the x -intercept of the line with equation $x + 2y = -6$?	
c.	What is the slope of a line parallel to the line with equation $2x + y = 4$?	
c.	Completely simplify $(ab^2)^3$ and write the result in the box.	
d.	Completely simplify $-4^2 w^2$ and write the result in the box.	
e.	Completely simplify $y^4 y^{17}$ and write the result in the box.	
f.	Completely simplify $(v^6)^7$ and write the result in the box.	
g.	What is the value of $f(4)$ if $f(x) = -x^2$?	
h.	What is the value of $f(29)$ if $f(x) = 7$?	
i.	What property is illustrated by the equation $5 \cdot (7 \cdot 6) = (5 \cdot 7) \cdot 6$?	
j.	Which of these numbers are integers? $-5, \pi, \frac{3}{8}, \frac{45}{5}, 0$	