Math 1111 Sample Quiz Name _____

2.1 – 2.3 Date _____

Directions: To receive partial credit you must show your work on a problem.
Circle final answers. All problems are 5 points each.

1. Find the slope of the line passing through (4.8, 3.1) and (–5.2, 1.6).

2. Write the equation of the line in slope-intercept form (y = mx + b) that goes through (1, 1) and $\left(6,-\frac{2}{3}\right)$.

3. Find the slope-intercept form of the equation of the line passing through (–10,4) and has slope m = 0.

4. Write the equation of the line in slope-intercept form (y = mx + b) that goes through (2, 1) and is perpendicular to 4x – 2y = 3.

5. Is the following relation a function ?

{(1,2),(5,7),(3,8),(5,4)}

6. Evaluate the function at each specified value and simplify. $f(x) = \sqrt{x + 8} + 2$

a) f(–8) b) f(1)

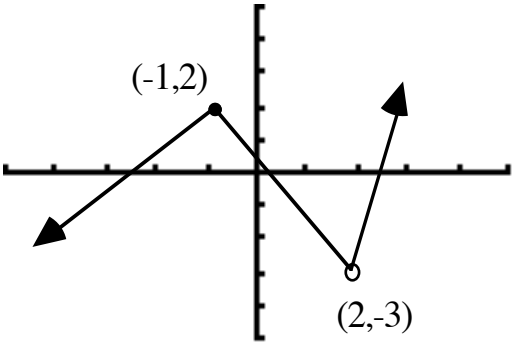
7. Evaluate the function at each specified value and simplify. $f(x) = \dfrac{3x-4}{5}$

a) f(2) b) f(–3)

8. State the Domain for the following:

$g(x) = \sqrt{x-10}$

9. Determine the intervals of the domain over which the given functions is increasing, decreasing, and constant.



Increasing _____

Decreasing _____

Constant _____

10. State the Domain for the following: $f(x) = \dfrac{2x-5}{3x+7}$

Answers to Sample Quiz

1. m = 0.15	2. $y = \frac{-1}{3}x + \frac{4}{3}$
3. y = 4	4. $y = \frac{-1}{2}x + 2$

5. NO the 5's repeat !	6. a) 2 b) 5
7. a) 2/5 b) –13/5	8. $[10,\infty)$
9. Inc.= $(-\infty,-1]$ and $(2,\infty)$ Decr. = [–1,2) Const = None	10. $x \neq \frac{-7}{3}$ or $\left(-\infty,\frac{-7}{3}\right)\cup\left(\frac{-7}{3},\infty\right)$