Math 0020 April 17, 2017 Sample Test 3

Consider the functions.

$f(x) = 2x - 3$
$g(x) = x^2 + 5$
$h(x) = \dfrac{2x}{3x + 2}$

1. Compute: g(11)

2. Compute: f(4.72)

3. Compute: h(4)

4. Graph y = f(x) on the x-y plane using the following points in the compled table.

x	2x - 3
0	
2	

5. Plot 4x + 5y = 200 on the x-y plane using x and y axis intercepts.

x	y
0	
	0

6. Fing the slope of the line through the points (3,6), (-1,18).

7. Fing the slope of the line 3x + 5y = 9

8. Find the equation of the line through the point (2,3) which is parallel to the line y = 3x - 11

9. Graph the inequality: $3x + 4y \leq 60$

10. Solve the linear system by substitution.

$$x + 3.7 = 5.1$$

$$2x + 8y = 14.2$$

11. Solve the linear system by elimination.

$$3x + 5y = 2$$

$$-6x + 2y = 5$$

12. Solve the linear system using Cramer's rule.

$$7x - 5y = 10$$

8x + 6y = 7

13. Solve the linear system using any method.

2.1x - 8.5y = 16.3

4.4x + 1.2y = 7.9

14. Convert this word problem to a 2x2 system, then solve it using any method.

There are 44 nickels and quarters worth $5.60. How many nickels and how many quarters are there?