Math 05, Homework 5 on Sections 4.3 - 4.4, 5.1 - 5.2
Hand in by Tue, Mar 8 at the start of class.

Write all your working out and answers on a separate sheet. It is very important that you show clearly any work you had to do to get the answer. These first ten questions are 2 points each and **the answers are on page 2**.

(1) Solve for y: $x + 4y = 16z - 3$

(2) Say which of these inequalities are true or false:

   (a) $5 > 3$,   **(b)** $-3 < -4$,   **(c)** $3 \geq 3$

(3) Graph all solutions for: $5x - 3 < 2x$

(4) Graph all solutions for: $-4x + 10 \leq 2x - 8$

(5) Is the ordered pair $(3, -2)$ a solution to $3x - 5y = 1$?

(6) Complete the ordered pair $(1, \ )$ so that it is a solution to $3x - 5y = 1$

(7) For the equation $2x + y = 3$ complete the table of values:

x	y
-2	
0	
2	

(8) Find the x-intercept and the y-intercept of the line $5x + 2y = 10$.

(9) Graph the line: $x + y = -1$

(10) Find the slope of the line between the two points: $(-2, 3)$ and $(4, -2)$

These next eight [1] questions are 2 points each. Show clearly all your working out and reasoning.

(11) Graph all solutions for: $x - 4 > -3x$

(12) Graph all solutions for: $7x - 2 \geq 4x + 7$

(13) Solve for x: $3x - 3y - 6z = -9$

(14) Is the ordered pair $(-2, 0)$ a solution to $3x - 23y = -6$?

(15) Complete the ordered pair $(\ , 1)$ so that it is a solution to $4x - 6y = 10$

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[1]Three more questions on the next page

(16) Find the x-intercept and the y-intercept of the line $-4x + y = 2$.

(17) Graph the line: $3x + y = 3$

(18) Find the slope of the line between the two points: $(-1, 1)$ and $(1, -1)$

Answers to questions (1)-(10):

(1) $y = \dfrac{16z - x - 3}{4}$

(2) **(a)** True,   **(b)** False,   **(c)** True

(3) Shade the real line to the left of 1 and put an open circle at 1

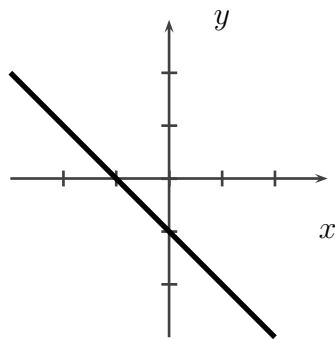*(4)* Shade the real line to the right of 3 and put a filled in circle at 3

(5) No it is not a solution

(6) $(1, 2/5)$

(7)

x	y
-2	7
0	3
2	-1

(8) The x-intercept is $(2, 0)$ and the y-intercept is $(0, 5)$.

(9)

(10) The slope is $-\dfrac{5}{6}$.