

Math 05, Homework 5 on Sections 4.3 - 4.4, 5.1 - 5.2

Write all your working out and answers on your own notepaper - no need to write the questions. Please use lots of space.

It is very important that you show clearly any work you had to do to get your answers. Just writing the answer down with no work shown is not enough. All 18 questions are worth 2 points each.

Do these first 10 questions and *check that your answers match the solutions on page 2*. If you don't get the same answers then try to fix them by looking at your notes or the book or asking me. Only do the last eight questions when you are sure you understand the first ten.

(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 $(-8, -5)$ a solution to $3x - 5y = 1$?

(6) Complete the ordered pair $(1, \quad)$ 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 $(4, -2)$

Eight more questions¹. Show clearly all your working out and reasoning.

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

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

¹questions continue on page 2

- (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 $(\quad, 1)$ so that it is a solution to $4x - 6y = 10$
- (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) $y = \frac{16z - x - 3}{4}$

(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

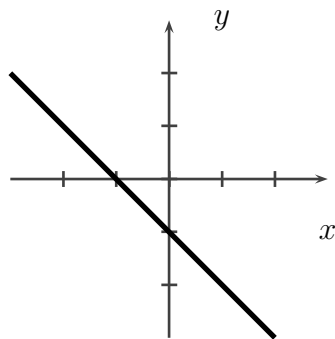
(5) Yes it is a solution

(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 $-\frac{5}{6}$.