

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

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 $(1, \quad)$ 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 $(4, -2)$
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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 $(\quad, 1)$ so that it is a solution to $4x - 6y = 10$
- (16) Find the x -intercept and the y -intercept of the line $-4x + y = 2$.

¹Two more questions on the next page

(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

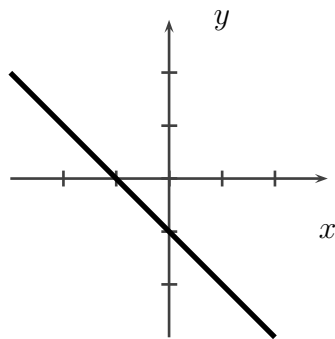
(5) No it is not a solution

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