MODULE 1

ABSOLUTE VALUE INEQUALITIES, LINES, AND FUNCTIONS

Name:_____ Points:_____

Exercise 1. Solve for x. Write your answer in interval notation.

(a) $2 \cdot \left|4x - 12\right| < 8$

(b) $(-2) \cdot \left|4x - 12\right| \leq -8$

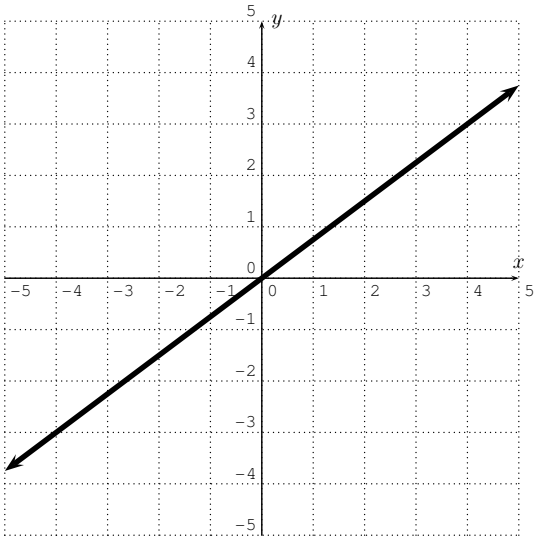
(c) $\left|7x+5\right| > 3$

(d) $\left|x+4\right| < -2$

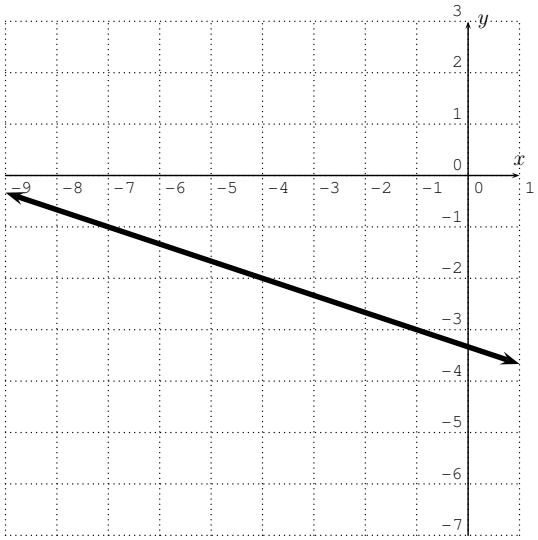
(e) $\left|x+4\right| > -2$

Exercise 2. Find the equation of the line in slope-intercept form.

(a)



(b)

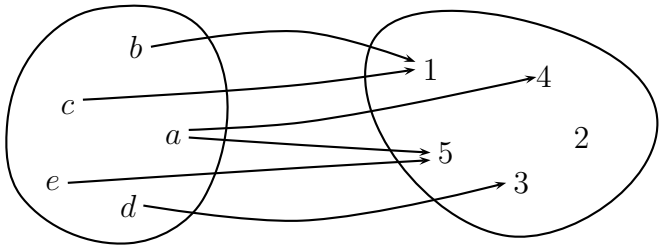


Exercise 3. Determine if the following assignments are functions. Justify your answer.

(a)

x	3	4	7	4
y	7	4	7	4

(b)



Can you define a function with domain and range given below? Justify your answer.

(c) domain = set of all college students in the U.S.
range = set of all colleges in the U.S.

(d) domain = set of all colleges in the U.S.
range = set of all college students in the U.S.