

ARRANGED HOUR FOR MATH 50

Math 50 – Section 1.1

Variables, Constants, Plotting Points, and Inequalities

Name _____

Instructor _____

Date _____

1. Which of the following are True or False, write T or F on the line next to each problem

a. $10 > 8$ _____

$10 \geq 8$ _____

b. $-5 < -5.1$ _____

$-5 > -5.1$ _____

c. $6 = \frac{18}{3}$ _____

$6 \leq \frac{18}{3}$ _____

2. If A is a set of digits $\{-2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}$, find the following (use set notation, that is $B = \{\dots\}$):

a) Write a set B which contains elements from set A which are at most 4.

b) Write a set C which contains elements from set A which are less than 4.

c) Write a set D which contains the elements from set A which are less than or equal to than 4.

d) Write a set E which contains the elements from set A which are greater than or equal to 4.

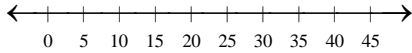
e) Write a set F which contains the elements from set A which are at least 4.

f) Based on your answers from parts a to e, which sets are equal? There may be more than one answer.

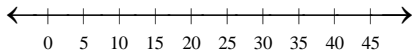
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3. Let t be the time in minutes it takes for a student to complete a homework assignment. Graph each of the following inequalities:

a. It takes the student at least 20 minutes to finish the assignment.

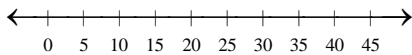


b. It takes the student at most 20 minutes to finish the assignment.

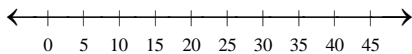


i. What do you need to consider when graphing this inequality?

c. It takes between 10 and 40 minutes to complete the assignment, inclusive.



d. It takes between 10 and 40 minutes to complete the assignment, not-inclusive.



i. What is the difference between the answers to part c and d?

e. It takes exactly 15 minutes to complete the assignment.

