

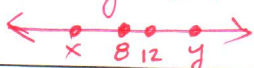
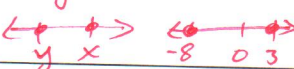
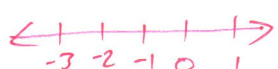
EXPLORING INTEGERS

1

Name: Key Date: _____ Period: _____

SECTION 1.2 LESS THAN AND GREATER THAN

VOCABULARY

DEFINITION	EXAMPLE
Less than: x is less than y if x is to the left of y on a number line	$x < y$ $8 < 12$ 
Greater than: x is greater than y if x is to the right of y on a number line	$x > y$ $3 > -8$ 
Characteristics of a number line: numbers go from smaller to larger left to right, horizontal or vertical line with an origin at 0	

Big Idea: How do we compare and order integers?

Based on the points x and y shown on the number line below, is x less than y , greater than y , or equal to y ? Explain.



x is greater than y because it is to the right of y on the number line.

EXAMPLE 1

For each pair of integers below, determine which one is greater and which one is less. Express your answer as an inequality of the form $x < y$, or $x > y$, where x and y are the given integers.

a. $3 < 7$

c. $-1 > -5$

b. $-2 < 9$

d. $4 > -4$

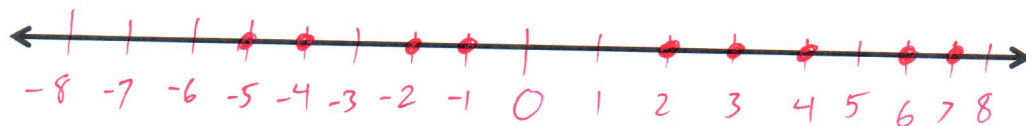
EXAMPLE 2

Put the following integers in order from least to greatest:

2, -2, 7, -1, -4, -5, 4, 6, 3

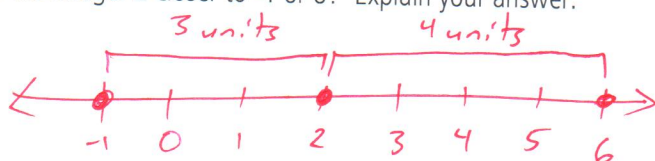
Use the number line to justify your answer.

-5, -4, -2, -1, 2, 3, 4, 6, 7



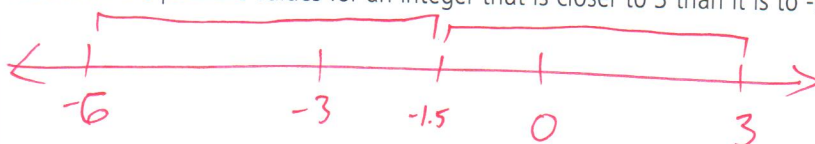
PRACTICE EXERCISES

1. Is the integer 2 closer to -1 or 6? Explain your answer.



2 is closer to -1 because the distance between them is less.

2. What are all the possible values for an integer that is closer to 3 than it is to -6?



any integer greater than -1.5: -1, 0, 1, 2, 3,

SUMMARY (What I learned today)
