

Concept: The Meaning of Integers

Name: _____

COMPUTER COMPONENT

Instructions: In  follow the **Content Menu** path:

Whole Numbers and Integers > The Meaning of Integers



Work through all Sub Lessons of the following Lessons **in order**:

- *Integers Around Us*
- *The Integer Line*
- *Opposite Integers*
- *Absolute Values*
- *Comparing Integers*
- *Example Questions*

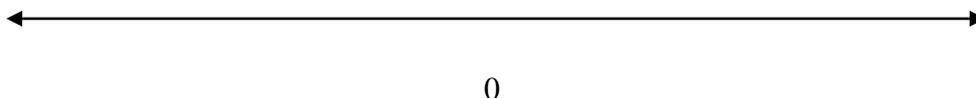


As you work through the computer exercises, you will be prompted to make notes in your notebook/math journal.

SUMMARY

1. Fill in the blanks for the following:

- (a) *Positive* integers indicate temperatures _____ zero or height _____ sea level.
- (b) *Negative* integers indicate temperatures _____ zero or height _____ sea level.
- (c) On the Integer Line, *positive* integers are found to the _____ of zero, whereas *negative* integers are found to the _____ of zero.
- (d) Label the integer line below.



- (e) The integers 4 and -4 are called _____ integers, since they are the same distance away from zero.
- (f) The absolute value of a number is its distance away from _____.
- (g) -1 is to the right of -4 on the number line; therefore, -1 is greater than _____. We use the symbol _____ to represent the words "greater than".

- (h) -3 is to the left of 1 on the number line; therefore, **-3** is less than _____.
 We use the symbol _____ to represent the words "less than".

OFF COMPUTER EXERCISES

1. Indicate, by circling, whether the following integers are *positive* or *negative*.

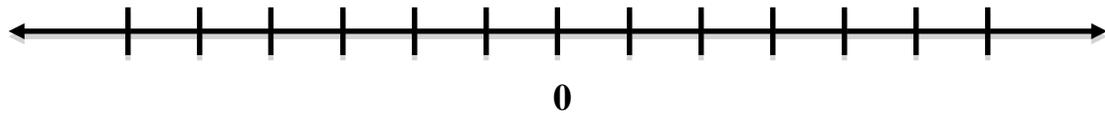
-1 positive negative

5 positive negative

10 positive negative

-6 positive negative

2. Label the integer 4 on the number line.



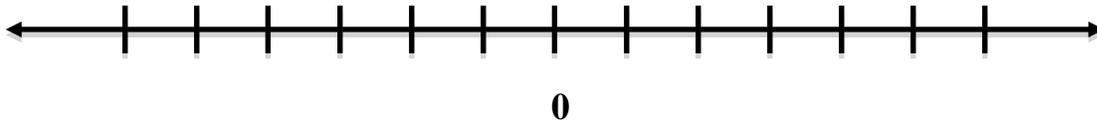
- (a) Is 4 a positive or negative integer? _____

- (b) Label the opposite integer for 4 on the number line and also write it in this space

- (c) What is the absolute value for the integer 4? _____. Why? _____

- (d) Compare the integers 4 and -6. Which integer is greater? Why? _____

3. Label the integer -5 on the number line.



(a) Is -5 a positive or negative integer? _____

(b) Label the opposite integer for -5 on the number line and also write it in this space

(c) What is the absolute value for the integer -5? _____. Why? _____

(d) Compare the integers -5 and 3. Which integer is greater? Why? _____

4. Fill in each blank with $>$ (greater than) or $<$ (less than).

(a) -5 _____ 1

(b) 6 _____ -1

(c) -8 _____ -2

(d) -3 _____ -5

(e) -3 _____ 0

(f) -1 _____ 9

5. Translate the following into one mathematical statement.

Example: $-1 < 2$ and $-1 > -3$ changed into one mathematical statement become: $-3 < -1 < 2$

(a) $-4 < 5$ and $-4 > -6$ becomes _____

(b) $1 < 6$ and $-3 < 1$ becomes _____

(c) $0 < 2$ and $0 > -4$ becomes _____

6. Arrange the following temperatures from **smallest to greatest**.

5°C 10°C -3°C 0°C 40°C -40°C -12°C

7. (a) Create your own number line below.



(b) Use your number line to help you answer the following questions.

(i) Find 5 less than 1 : _____.

(ii) Find 4 less than 2: _____.

(iii) Find 2 less than -5: _____.

(iv) Find 3 less than -2 : _____.

8. Indicate, by circling, whether these statements are true or false.

(a) $-5 > 8$ true false

(b) $|-3| = -3$ true false

(c) $0 > -6$ true false

(d) $|-5| = 5$ true false

9. Represent each statement with an integer.

(a) 300m below sea level. _____

(b) Your brother made \$55 babysitting last week. _____

(c) You owe your Dad \$20. _____