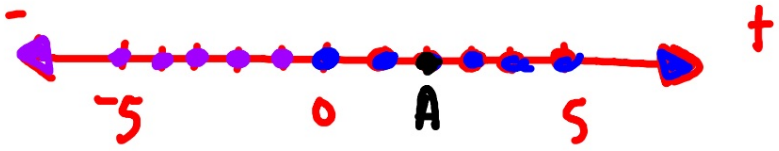
Alg 1A 2.1

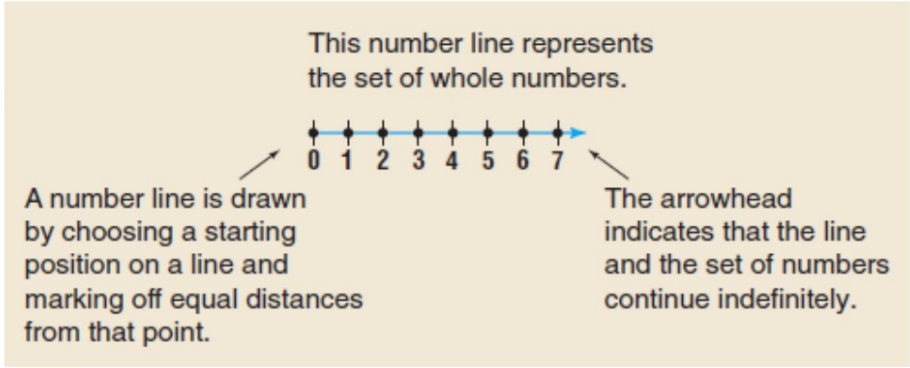
Graph integers on a number line
Compare integers
Order integers



number line
positive number
zero
negative number
integer
whole number
natural number
graph
coordinate
absolute value
order of operations

nu frac. or dec.

1.2



GEMA

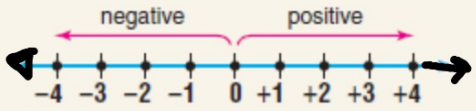
activity: floor graphs
cards compare

Integers

Words: Integers are the negative numbers $-1, -2, -3, -4, \ldots$ and whole numbers $0, 1, 2, 3, 4, \ldots$

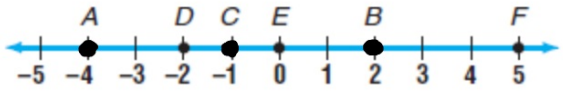
Symbols: $\{\ldots, -4, -3, -2, -1, 0, 1, 2, 3, 4, \ldots\}$

Model:



Zero is neither negative nor positive.

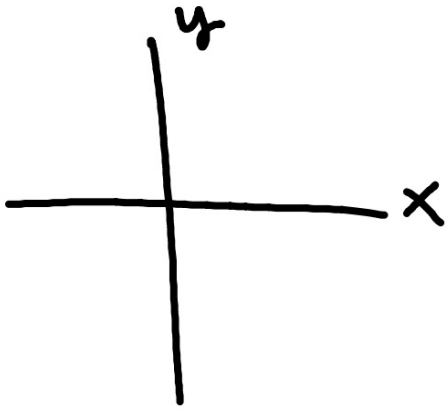
1 Name the coordinates of A, B, and C.



A = −4

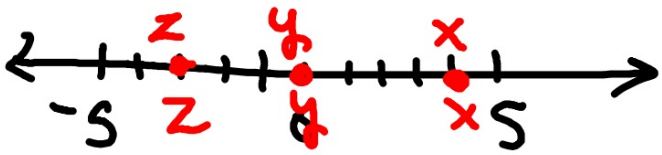
B = +2

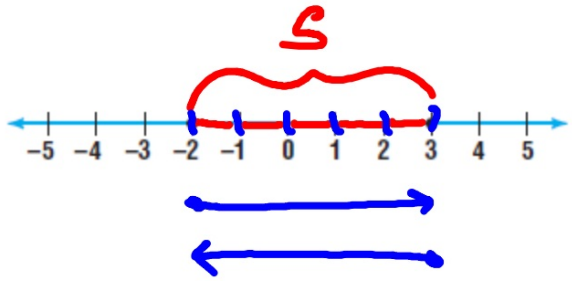
C = −1



4 0 −3

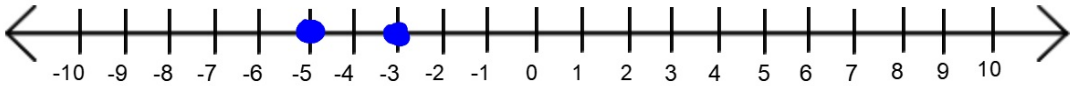
2 Graph points X, Y, and Z on a number line if X has coordinate 4, Y has coordinate 0, and Z has coordinate -3.




S
−5 −4 −3 −2 −1 0 1 2 3 4 5

Compare

= < >



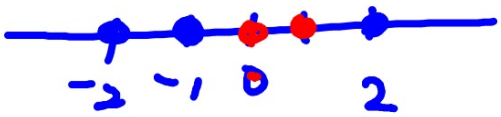
3 $4 > -1$

less

more

4 $-5 < -3$

$5 > 3$



Your Turn

c. $-1 > -2$ d. $2 > -2$ e. $0 < 1$

$<$ $>$ $=$

less than

greater than

5 The table shows the average high temperatures for January in selected cities. Order the temperatures from least to greatest.

City	Temperature (°C)
Boston, MA	2
Chicago, IL	−2
Detroit, MI	−1
Juneau, AK	3
New York, NY	4
St. Louis, MO	−3

-3 -2 -1 2 3 4

Absolute Value

Words: The absolute value of a number is the distance it is from 0 on the number line.

Model:

Numbers: $|-4| = 4, |4| = 4$

Evaluate each expression.

6. $|-3|$

7. $|-5| - |2|$

f. $|9|$

g. $|-2| + |-6|$

h. $|15| - |-4|$