

Introducing Integers



Objectives:

- 1) Define and identify integers
- 2) Write the opposites of integers
- 3) Use integers to represent real-world data
- 4) Graph integers on a number line and a line plot
- 5) Compare and order integers

Vocabulary



integers

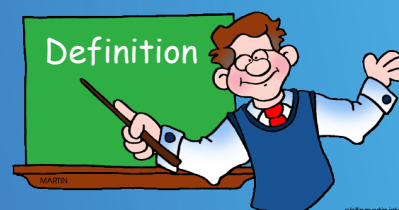
negative
numbers

&

positive
numbers

opposites

Integers



Integers are all whole numbers and their opposites.

An integer can be any one of the following :

... -4, -3, -2, -1, 0, +1, +2, +3, +4, ...

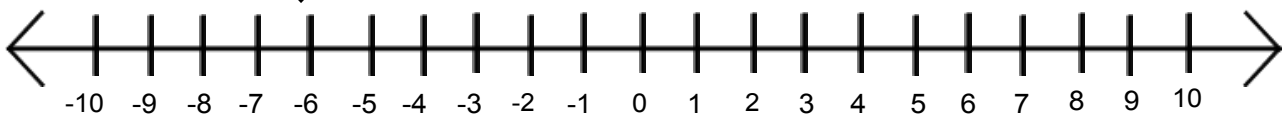
practice 

Positive & Negative Numbers



negative numbers

positive numbers



Zero is neither positive nor negative

- ★ Negative numbers are always written with a minus (-) sign.
- ★ Positive numbers can be written with or without a plus (+) sign.

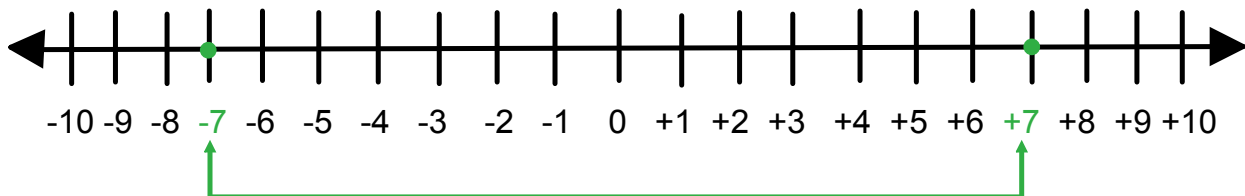
practice 

Opposites



Opposite integers are integers that are an equal distance from zero.

Example: $+7$ and -7 are opposites



opposites
practice 

Use integers to represent data



Integers can be used to represent real-world data.



finance



games



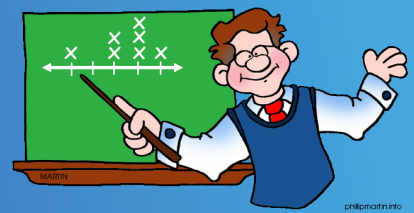
elevation



temperature

practice 

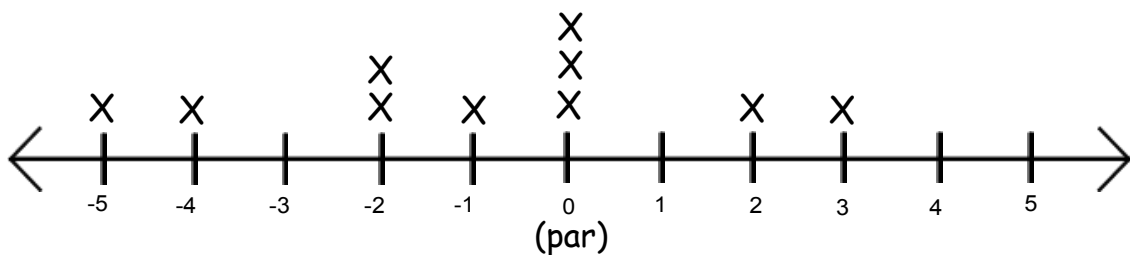
Create line plots using integers



Line plots can include negative integers!

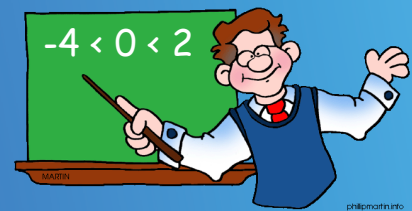
Sean plotted his golf scores for his last 10 games below.
(in reference to par)

Golf Scores

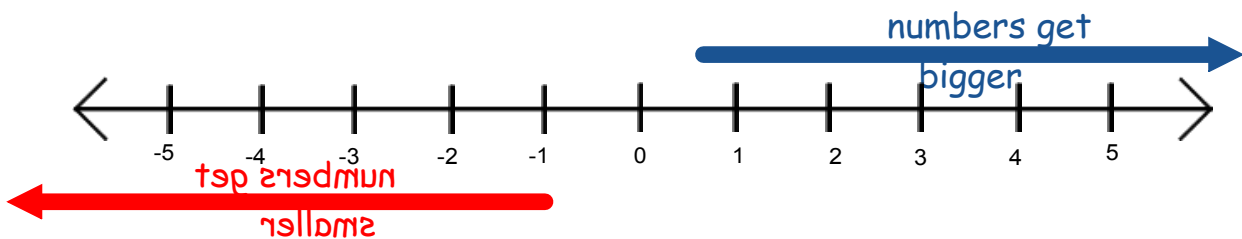


practice 

Compare and Order Integers



Numbers are arranged in order from least to greatest on a number line.



Any number is greater than all the numbers to its left on a number line (or less than all the numbers to its right).

practice 

Find the integers.

If they are not integers throw them in the garbage.



73

75.35

68

$\frac{25}{53}$

$-\frac{8}{18}$

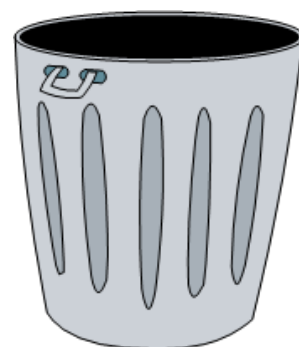
- 594

$\frac{4}{14}$

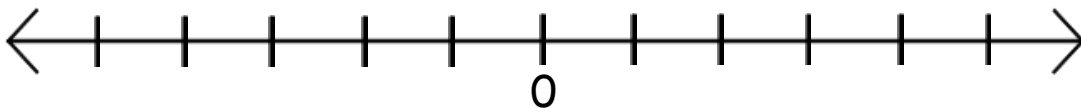
235

- 3,752

.85

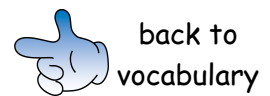


Drag the integers to their position on the number line.



● 3 ● -4 ● 2 ● 5 ● -2 ● 1 ● -5

Check



Match each integer with its opposite.



Drag the integer beside its opposite.

+34 _____

-12 _____

-2 _____

+64 _____

-843 _____

+ 2

- 64

+ 12

+ 843

-34

next



Using positive and negative words...

Drag the words to the correct category.



negative (-)	positive (+)

withdrawal

deposit

fall

decrease

more practice 

Write an integer for
each phrase.

Use the Magic Eraser to
reveal the correct
answers!



Seven degrees below zero

Going up four floors on the elevator

Owing \$50

150 meters above sea level

Move back four spaces

Five shots under par

next



Make a line plot of the data



The table shows the lowest temperatures recorded over a 30 day period in Denver. Use the "x" to record the data on the line plot.

x

Lowest Temperatures (°F)				
-1	0	9	-5	13
15	12	-8	7	-10
5	0	7	-6	5
-10	-5	0	10	12
4	-2	-2	8	12
0	7	4	-5	9

Lowest Temperatures (°F)



Check

next

Compare the integers

Drag the correct sign between the pairs of integers.



<

>

$5 \bigcirc -1$



$-2 \bigcirc 2$



$-3 \bigcirc -5$



$0 \bigcirc -2$



$-5 \bigcirc 2$



$-1 \bigcirc 3$



$-4 \bigcirc -2$



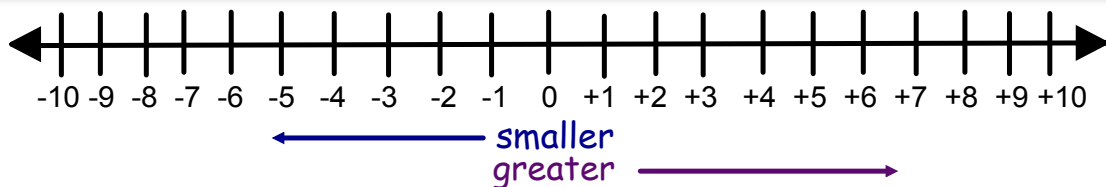
$-3 \bigcirc 3$



more
practice



Use the number line to write the integers in order from greatest to smallest.



A. -4, +6, -2, +1, 0 _____

B. -2, -4, -1, -13 _____

C. -6, +6, -3, +3, 0 _____

D. -22, -36, -1, 0 _____

Move the rectangle up to reveal the answers.

