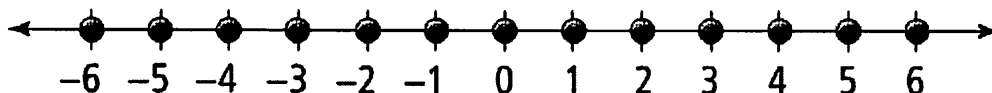


"I Understand the Relationship of a Number and its Opposite and Can Recognize that the Opposite of a Number's Opposite is the Number itself."

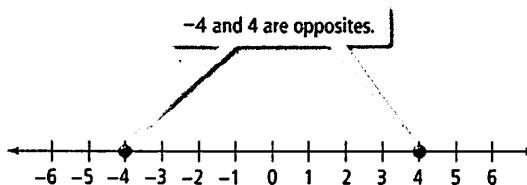
"I Can Explain How Positive and Negative Numbers Relate to Real-World Examples and the Meaning of of in each."

Integers and the Number Line

Integers: the set of positive and negative whole numbers along with 0.



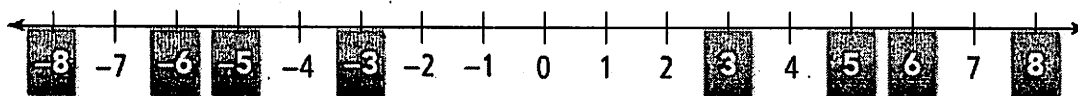
Opposites: two numbers that are the same distance from 0 on a number line but in opposite directions



What is the opposite of... 9 _____ 3 _____ -10 _____ 0 _____

Example

Which integer represents each situation?



- a. 5 degrees below zero
- b. a gain of 8 yards
- c. a loss of 6 dollars
- d. 3 steps backward

Got It?

The lowest point in the United States is in Death Valley. Its elevation is 282 ft below sea level. Express this elevation as an integer.

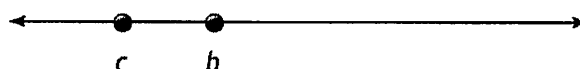
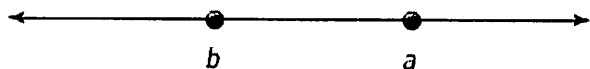
Comparing and Ordering Integers

Intro

Remember, the symbol $>$ means "greater than" and the symbol $<$ means "less than". On a number line, the numbers increase from left to right.

If $a > b$, then a is to the right of b on a number line.

If $c < b$, then c is to the left of b on a number line.



Example

Complete each statement.



a. $6 \square 9$

b. $-8 \square -5$

c. $-3 \square -4$

d. $2 \square -1$

e. $-2 \square 0$

f. $-7 \square -9$

Part Two:

Example

During January, in Montréal, Canada, the temperature at 1 P.M. was -8°C . The temperature at 11 P.M. was -12°C . Write an inequality to compare the two temperatures. When was it warmer?

Got It?

The temperature at the start of a cross-country ski race was -8°C . The temperature at the end of the race was -2°C . Write an inequality comparing the temperatures. When was it colder?

Part Three:

Example

The table shows the number of yards gained or lost by a high school football team during the first play in each game. Order the results of the plays from least yards to most yards gained.



Yards Gained and Lost

	Play	Result
Game 1	Sack	-10 yards
Game 2	Run	5 yards
Game 3	Pass	3 yards
Game 4	Run	-4 yards
Game 5	Pass	-1 yard

Least

Greatest

"I Understand the Relationship of a Number and its Opposite and Can Recognize that the Opposite of a Number's Opposite is the Number itself."

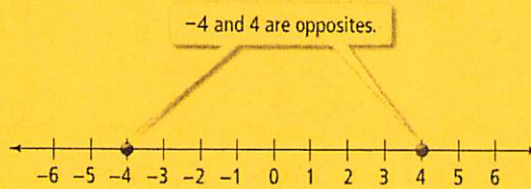
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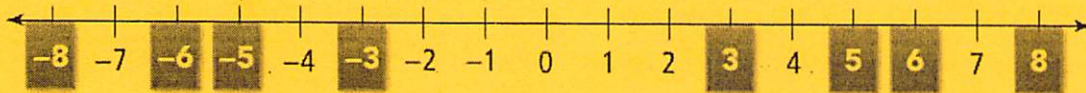
Opposites: two numbers that are the same distance from 0 on a number line but in opposite directions



What is the opposite of... 9 -9 3 -3 -10 10 0 0

Example

Which integer represents each situation?



- a. 5 degrees below zero -5 b. a gain of 8 yards 8
 c. a loss of 6 dollars -6 d. 3 steps backward -3

Got It?

The lowest point in the United States is in Death Valley. Its elevation is 282 ft below sea level. Express this elevation as an integer.

-282 ft

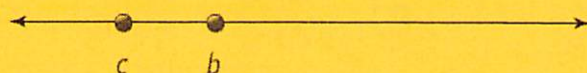
Comparing and Ordering Integers

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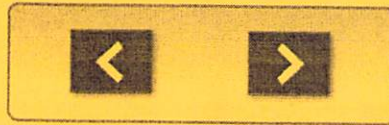
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If $c < b$, then c is to the left of b on a number line.



Example

Complete each statement.



a. $6 < 9$

b. $-8 < -5$

c. $-3 > -4$

d. $2 > -1$

e. $-2 < 0$

f. $-7 > -9$

Part Two:

Example

During January, in Montréal, Canada, the temperature at 1 P.M. was -8°C . The temperature at 11 P.M. was -12°C . Write an inequality to compare the two temperatures. When was it warmer?

$$\underline{-8^{\circ}\text{C} > -12^{\circ}\text{C}}$$

1 PM

Got It?

The temperature at the start of a cross-country ski race was -8°C . The temperature at the end of the race was -2°C . Write an inequality comparing the temperatures. When was it colder?

$$\underline{-8^{\circ}\text{C} < -2^{\circ}\text{C}}$$

START

Part Three:

Example

The table shows the number of yards gained or lost by a high school football team during the first play in each game. Order the results of the plays from least yards to most yards gained.



Yards Gained and Lost

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Game 1	Sack	-10 yards
Game 2	Run	5 yards
Game 3	Pass	3 yards
Game 4	Run	-4 yards
Game 5	Pass	-1 yard

Least

-10

-4

-1

3

5

Greatest