

6.1 INTEGERS

Guided Notes

1

Positive numbers are _____ than 0. They can be written _____ or _____ a sign ().

Negative numbers are _____ than 0. They are written with a _____ ().

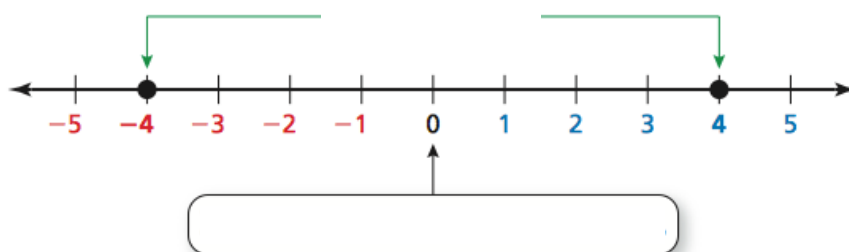
Two numbers that are the _____ from _____ on a number line, but on _____ sides of _____ are called _____. The opposite of _____

Key Idea

Integers

Words **Integers** are the set of _____ numbers and their _____

Graph



EXAMPLE 1 Writing Positive and Negative Integers

Write a positive or negative integer that represents the situation.

- a. A contestant gains 250 points on a game show.

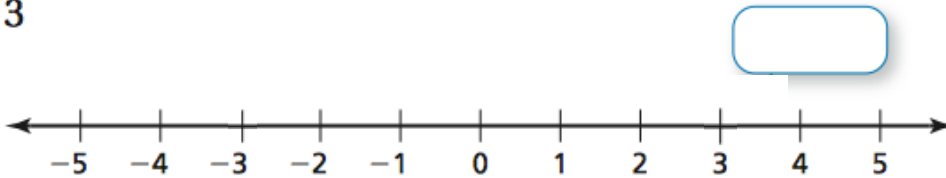
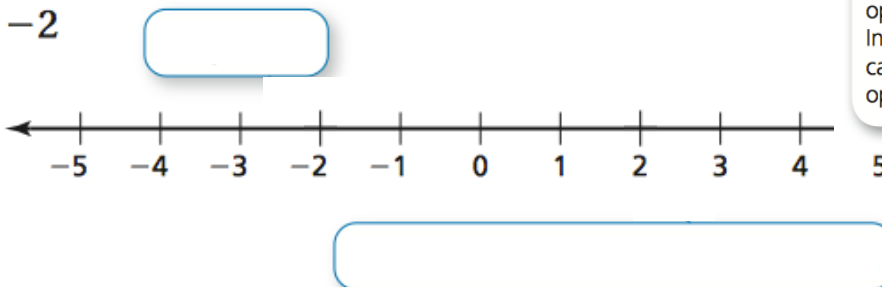
_____ indicates a number _____ than 0. So, use a _____ integer.



- b. Gasoline freezes at 40 degrees below zero.

_____ indicates a number _____ than 0. So, use a _____ integer.

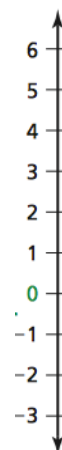


EXAMPLE 2 Graphing Integers**2****Graph each integer and its opposite.****a. 3****b. -2****Reading**

You can think of the negative sign ($-$) as referring to the opposite of a number. In Example 2(b), you can read -2 as "the opposite of 2."

EXAMPLE 3 Real-Life Application

You deliver flowers to an office building. You enter at ground level and go down 2 floors to make the first delivery. Then you go up 7 floors to make the second delivery.

a. Write an integer that represents each position.*Position**Integer*

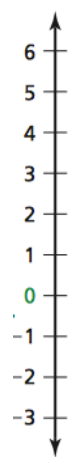
3

b. Write an integer that represents how you return to ground level.

Use a number line to model your movement, as shown.

The second delivery is on the floor. You must go _____ floors to return to ground level.

••• The integer representing “_____” is _____



3

b. Write an integer that represents how you return to ground level.

Use a number line to model your movement, as shown.

The second delivery is on the floor. You must go _____ floors to return to ground level.

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