2–9 Integers and Graphing

MAIN IDEA

- Use integers to represent real-world data.

BUILD YOUR VOCABULARY (pages 27–28)

Data that are less than zero are represented by **negative numbers**. Data that are greater than zero are represented by **positive numbers**.

Opposites are numbers that are the _____ distance from zero in opposite directions.

Positive whole numbers, their opposites, and _____ are called **integers**.

EXAMPLES Use Integers to Represent Data

Write an integer to represent each piece of data.

1 **GROWTH** **A height increase of 3 inches.**

An *increase* represents a _____ number.

The integer is _____.

2 **GOLF** **A golfer is seven shots below par.**

The word *below* represents a _____ number.

The integer is _____.

Check Your Progress **Write an integer to represent each piece of data.**

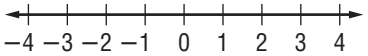
a. 12 degrees above zero

b. loss of 8 yards.

EXAMPLE Graph an Integer on a Number Line

3 **Graph −2 on a number line.**

Draw a number line. Then draw a dot at the location that represents _____.



WRITE IT

Write a sentence about another real-life situation when you would use a negative number.

_____

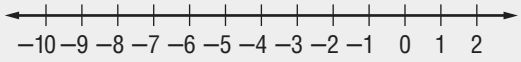
_____

_____

_____

_____

Check Your Progress Graph −5 on a number line.



EXAMPLE

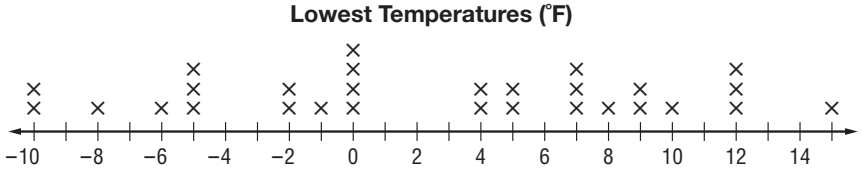
4 **WEATHER** **The table shows the lowest temperatures in some cities and towns. Make a line plot of the data.**

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

Draw a number line.

[ ] would be plotted farthest to the left and [ ] farthest to the right.

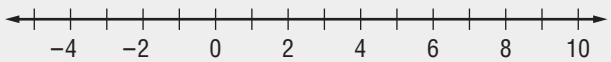
So you can use a scale of [ ] to [ ]. Put an × above the number that represents each temperature in the table.



Check Your Progress

VIDEO GAMES The table shows Carter's score each time he played a video game. Make a line plot of the data.

Video Game Scores			
−4	−1	10	5
8	2	−2	4
10	−4	2	10
−2	10	8	−2



HOMEWORK ASSIGNMENT

Page(s):

Exercises: