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## 2-9 Study Guide and Intervention <br> Integers and Graphing

Negative numbers represent data that are less than 0 . A negative number is written with $\mathrm{a}-$ sign. Positive numbers represent data that are greater than 0 . Positive numbers are written with $\mathrm{a}+$ sign or no sign at all.
Opposites are numbers that are the same distance from zero on a number line, but in opposite

Example 1 Write an integer to show 3 degrees below zero. Then graph the integer on a number line.

Numbers below zero are negative numbers. The integer is -3 .
Draw a number line. Then draw a dot at the location that represents -3 .
$\xrightarrow[-6-5-4-3-2-1]{+\mid} 0$

Example 2 Make a line plot of the data represented in the table.
Draw a number line. Put an $\times$ above the number that represents each score in the table.

## Rachel's Summer Golf Scores



| Rachel's Summer Golf Scores |  |  |  |
| :---: | :---: | :---: | :---: |
| 0 | +3 | -4 | -2 |
| +1 | +3 | -4 | 0 |
| +1 | -5 | -2 | +1 |

## Exercises

Write an integer to represent each piece of data. Then graph the integer on the number line.

1. 4 degrees below zero
2. a gain of 2 points

3. BOOKS The table shows the change in the ranking from the previous week of the top ten best-selling novels. Make a line plot of the data.

| Novel | A | B | C | D | E | F | G | H | I | J |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Change in Ranking | +3 | -2 | 0 | +1 | -2 | 0 | +2 | -4 | +1 | -2 |

