Algebra 1

Data Updates

Chapter 2

Lesson 2.1, page 64, Focus on Applications

Around December 21, the northern hemisphere has its shortest day and longest night. On that day, Nome has only 3 hours and 53 minutes of daylight.

Lesson 2.1, page 64, Example 4, Nome, Alaska

The table below shows the low temperatures recorded in Nome, Alaska, each day for six days in December.

| Date | Temp. |
|---------|-------|
| Dec. 19 | 11°F |
| Dec. 20 | 1°F |
| Dec. 21 | −3°F |
| Dec. 22 | −3°F |
| Dec. 23 | -11°F |
| Dec. 24 | −17°F |

- **a.** Which low temperature reading was the coldest?
- **b.** Which dates had low temperatures above 5°F?
- **c.** Which dates had low temperatures below -10° F?

Solution

- **a.** The coldest temperature was -17° F on December 24.
- **b.** On December 19, the low temperature, 11° F, was above 5° F.
- **c.** Low temperatures were below -10° F on December 23 $(-11^{\circ}$ F) and December 24 $(-17^{\circ}$ F).

Lesson 2.4, page 87, Example 3, Congress

The United States Congress is composed of the House of Representatives and the Senate. The matrices below show the number of men and women in the Senate and the House at the 2001 start of the 107th Congress. Write and label a single matrix that shows the number of men and women in Congress in 2001.

House

| ľ | <u>Men</u> | Won | nen |
|------------|------------|-----|-----|
| Democrat | 168 | 42 | |
| Republican | 202 | 18 | |
| Other | 2 | 0 | |

Senate

| M | Men | | Women | |
|------------|-----|----|-------|--|
| Democrat | 40 | 10 | | |
| Republican | 46 | 3 | | |
| Other | 1 | 0 | | |
| | | | | |

Solution

Congress

| | Men | Wor | nen |
|------------|-----|-----|-----|
| Democrat | 208 | 52 | |
| Republican | 248 | 21 | |
| Other | 3 | 0 | |
| | | | |