Problem-Solving Application: Use Temperature

Read It Look for information.

The temperature in the morning was 13°F. During the day, the temperature rose 5 degrees. The temperature then fell 8 degrees in the evening. What was the temperature in the evening?

Picture It Here is a model of the information.

\[
\begin{align*}
\text{Temperature on the morning} & = 13°F \\
\text{Temperature rose 5 degrees} & = 13°F + 5°F = 18°F \\
\text{Temperature fell 8 degrees} & = 18°F - 8°F = 10°F
\end{align*}
\]

Count up when the temperature rises, count down when the temperature falls.

Solve It Use the model to solve the problem.

1. Start with the morning temperature, add the number of degrees the temperature rose, then subtract the number of degrees the temperature fell.

\[13 + 5 - 8 = 10\]

Try These!

2. In January, the average daily temperature for Matinsburg is 8°C. In February, the average daily temperature is 2 degrees lower than in January. In March, the average daily temperature is 4 degrees higher than in February. What is the average daily temperature in March?

\[
\begin{align*}
\text{January temperature} & = 8°C \\
\text{February temperature} & = 8°C - 2°C = 6°C \\
\text{March temperature} & = 6°C + 4°C = 10°C
\end{align*}
\]

3. At 7 A.M. the temperature was 22°F. The temperature rose 2 degrees each hour. What was the temperature at 3 P.M.?

\[
\begin{align*}
\text{Temperature at 7 A.M.} & = 22°F \\
\text{Temperature rose 2 degrees per hour} & = 22°F + 8°F = 30°F
\end{align*}
\]