



# Temperature Changes

**TAKS Objectives 4, 6**  
**TEKS 5.11A, 5.14A**

## Solve.

1. The temperature of a pot of water on a stove is  $196^{\circ}\text{F}$ . This is  $118^{\circ}\text{F}$  higher than the temperature of the water before the pot was placed on the stove. What was the temperature of the water before being heated?

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3. From 6:00 A.M. to noon, the temperature rose  $6^{\circ}\text{F}$ . By 3:00 P.M., it rose another  $2^{\circ}\text{F}$ . At sunset, the temperature had dropped  $4^{\circ}\text{F}$ . The temperature at sunset was  $72^{\circ}\text{F}$ . What was the temperature at 6:00 A.M.?

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5. Miles is making frozen orange juice popsicles. He recorded the temperature of the orange juice before putting it in the freezer. Three hours later, Miles finds that the temperature of the orange juice has dropped  $19^{\circ}\text{F}$  but is still not frozen. What is the lowest possible starting temperature of the orange juice? Explain.

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2. The highest recorded March temperature for Fairbanks, Alaska is  $13^{\circ}\text{C}$ . This is  $24^{\circ}\text{C}$  lower than the highest recorded March temperature for Tucson, Arizona. What is the highest recorded March temperature for Tucson?

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4. A scientist took the temperature of an air sample each hour from 10:00 A.M. to 2:00 P.M. The first reading was  $57^{\circ}\text{F}$ . The second reading was  $8^{\circ}\text{F}$  lower. The temperature rose  $7^{\circ}\text{F}$  each hour for the next 3 hours. What was the 1:00 P.M. temperature of the air sample?

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6. Maria is boiling water to make oatmeal. She recorded the temperature of the water before putting it on the stove. Five minutes later, Maria finds that the temperature of the water has risen  $64^{\circ}\text{C}$  but is still not boiling. What is the highest possible starting temperature of the water? Explain.

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