## Unit 5, Lesson 2: Changing Temperatures

1. a. The temperature is $-2^{\circ} \mathrm{C}$. If the temperature rises by $15^{\circ} \mathrm{C}$, what is the new temperature?
b. At midnight the temperature is $-6^{\circ} \mathrm{C}$. At midday the temperature is $9^{\circ} \mathrm{C}$. By how much did the temperature rise?
2. Complete each statement with a number that makes the statement true.
a. $\qquad$ $<7^{\circ} \mathrm{C}$
b. $\qquad$ $<-3^{\circ} \mathrm{C}$
c. $-0.8^{\circ} \mathrm{C}<$ $\qquad$ $<-0.1^{\circ} \mathrm{C}$
d. $\qquad$ $>-2^{\circ} \mathrm{C}$
(from Unit 5, Lesson 1)
3. Draw a diagram to represent each of these situations. Then write an addition expression that represents the final temperature.
a. The temperature was $80^{\circ} \mathrm{F}$ and then fell $20^{\circ} \mathrm{F}$.
b. The temperature was $-13^{\circ} \mathrm{F}$ and then rose $9^{\circ} \mathrm{F}$.
c. The temperature was $-5^{\circ} \mathrm{F}$ and then fell $8^{\circ} \mathrm{F}$.
4. Decide whether each table could represent a proportional relationship. If the relationship could be proportional, what would be the constant of proportionality?
a. The number of wheels on a group of buses.

| number of buses | number of wheels | wheels per bus |
| :---: | :---: | :---: |
| 5 | 30 |  |
| 8 | 48 |  |
| 10 | 60 |  |
| 15 | 90 |  |

b. The number of wheels on a train.

| number of train <br> cars | number of <br> wheels | wheels per train <br> car |
| :---: | :---: | :---: |
| 20 | 184 |  |
| 30 | 264 |  |
| 40 | 344 |  |
| 50 | 424 |  |

(from Unit 2, Lesson 7)
5. Noah was assigned to make 64 cookies for the bake sale. He made $125 \%$ of that number. $90 \%$ of the cookies he made were sold. How many of Noah's cookies were left after the bake sale? (from Unit 4, Lesson 7)

