

Key

## Temperature Changes

1.

The temperature was  $+3^{\circ}\text{C}$  at midday.

By evening, the temperature was  $-5^{\circ}\text{C}$ .



*Final Temp - Initial Temp = Temp Change*

(a) Some of the calculations below show how to figure out the temperature change.

Circle any that apply.

$3 - 5$

$3 + (-5)$

$(-5) - 3$

$(-5) + 3$

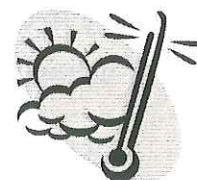
(b) What was the change in temperature? Explain your answer.

*-8°C. The temp went from  $3^{\circ}\text{C}$  to  $-5^{\circ}\text{C}$  which is an  $8^{\circ}\text{C}$  drop or  $-8^{\circ}\text{C}$*

2.

The temperature was  $-7^{\circ}\text{C}$  at midnight.

By the next day, the temperature had risen by  $11^{\circ}\text{C}$ .



(a) Some of these calculations show how to figure out the temperature the next day.

Circle any that apply.

$7 - 11$

$11 + (-7)$

$(-11) - (-7)$

$(-7) + 11$

(b) What was the temperature the next day? Explain your answer.

*$4^{\circ}\text{C}$ ; The temp was  $-7^{\circ}\text{C}$  and went up  $11^{\circ}\text{C}$  which ends up at  $4^{\circ}\text{C}$ .*

3. Here is a calculation:

$$5 - (-11)$$



(a) Figure out the answer to the calculation:

$$5 - -11 = 16$$

(b) Which of these story questions fits the calculation? Circle any that apply.

A	It was extremely cold at midnight. During the morning, the temperature rose by $5^{\circ}\text{C}$ . By midday, it had reached $-11^{\circ}\text{C}$ . What was the temperature at midnight?
<input checked="" type="radio"/> B	The temperature at midnight was $-11^{\circ}\text{C}$ . By midday, the temperature was $5^{\circ}\text{C}$ . What was the temperature change?
C	At midday, the temperature was $5^{\circ}\text{C}$ . The temperature then fell by $11^{\circ}\text{C}$ . What was the final temperature?

Explain your answer:

If the Initial Temp was  $-11^{\circ}\text{C}$  and the Final Temp is at  $5^{\circ}\text{C}$ , this temp increased from  $-11^{\circ}\text{C}$  to  $5^{\circ}\text{C}$  by  $16^{\circ}\text{C}$ .