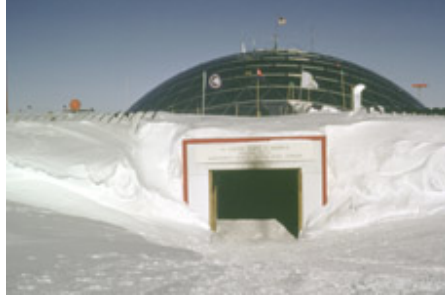


# Antarctic temperatures

This task is about linear equations that show change in temperature.



Temperatures at Scott Base are measured at 6:00 a.m. in the morning, and 6:00 p.m. in the evening. One Wednesday evening the temperature was  $-25^{\circ}\text{C}$ . It had risen  $13^{\circ}\text{C}$  since the morning.

a) This equation shows the temperature change on that Wednesday.

$$t + 13 = -25$$

i) What does  $t$  represent in the equation above?

ii) What is the value of  $t$ ?   $^{\circ}\text{C}$

b) This equation describes the change in temperature from that Wednesday evening to the following Thursday morning.

$$-25 + x = -16$$

i) What was the temperature on Thursday morning?   $^{\circ}\text{C}$

ii) By how much did the temperature change overnight?   $^{\circ}\text{C}$

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