

**SMART EXAM RESOURCES**  
**CAMBRIDGE LOWER SECONDARY**  
**STAGE 7 PAST PAPERS**  
**MATHS**  
**INTEGERS-SET-2**

- 1 At noon one day the temperature is  $-9.5^{\circ}\text{C}$ .  
By midnight the temperature has fallen by  $3.6^{\circ}\text{C}$ .  
What is the temperature at midnight?

Answer .....  $^{\circ}\text{C}$  [1]

**Mark Scheme:**

	-13.1	1	
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2

The average temperatures in Moscow for each month are shown in the table below.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature °C	-10	-8.9	-4.0		12.2	16.3	18.5				-2.0	-7.5

(a) Which month has the lowest average temperature?

Answer(a) ..... [1]

(b) Find the difference between the average temperatures in July and December.

Answer(b) °C [1]

**Mark Scheme:**

(a)	Jan	B1	Not just $-10.2$ but ignore if included.
(b)	26(.0)	B1	Allow $-26$

- 3 On a winter's day in Vienna the maximum temperature was  $-2^{\circ}\text{C}$ .  
The minimum temperature was  $11^{\circ}\text{C}$  lower than this.  
Write down the minimum temperature.

Answer .....  $^{\circ}\text{C}$  [1]

**Mark Scheme:**

	-13	1	Not 13–
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- 4 In May, the average temperature in Kiev was  $12^{\circ}\text{C}$ .  
In February, the average temperature was  $26^{\circ}\text{C}$  lower than in May.  
What was the average temperature in February?

*Answer*

$^{\circ}\text{C}$  [1]

**Mark Scheme:**

-14	1	
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5

Martin recorded the outside temperature every three hours.  
At 07 00 the temperature was  $-2^{\circ}\text{C}$ .

- (a) This was  $5^{\circ}\text{C}$  higher than the temperature at 04 00.  
Write down the temperature at 04 00.

Answer(a) .....  $^{\circ}\text{C}$  [1]

- (b) At 10 00 the temperature was  $11^{\circ}\text{C}$ .  
Write down the increase in temperature between 07 00 and 10 00.

Answer(b) .....  $^{\circ}\text{C}$  [1]

**Mark Scheme:**

(a) $-7$	1	
(b) $13$	1	

6

In a desert the temperature at noon was  $38^{\circ}\text{C}$ .  
At midnight the temperature was  $-3^{\circ}\text{C}$ .

- (a) Find the change in temperature between noon and midnight.

Answer(a) .....  $^{\circ}\text{C}$  [1]

- (b) At 02 00 the temperature was  $4^{\circ}\text{C}$  below the midnight temperature.

Write down the temperature at 02 00.

Answer(b) .....  $^{\circ}\text{C}$  [1]

**Mark Scheme:**

(a) 41 or -41	1	
(b) -7	1	