SMART EXAM RESOURCES
CAMBRIDGE LOWER SECONDARY
STAGE 7 PAST PAPERS
MATHS
INTEGERS-SET-1

1   The temperatures at sunrise in Berne on the seven days of one week were:

Sunday	-1 °C
Monday	-7 °C
Tuesday	-6 °C
Wednesday	1 °C
Thursday	3 °C
Friday	0 °C
Saturday	-4 °C

(a)   List the days on which the temperature at sunrise was less than –3 °C.

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

(b)   Work out the mean (average) of the seven temperatures.

Mark Scheme:

(a)	Monday, Tuesday and Saturday	1	All three and no extras	
(b)	-2o	3	**B1** for −14 seen + **M1** for (their −14) ÷ 7	**4**

2   The Dead Sea shore is 395 metres **below** sea level.
Hebron is 447 metres **above** sea level.
Find the difference in height.

Answer .... [1]

Mark Scheme:

		842	1	Ignore any or no units after answer. Allow 84200cm.

3

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Minimum temperature °C	4	6	0	−2	−4	2	
Maximum temperature °C	8	10	5	7	2	7	

The table shows the minimum and maximum temperatures on six days of a week.

(a) (i) On Sunday the minimum temperature was 5 °C lower than on Saturday.
The maximum temperature was 2 °C higher than on Saturday.
Use this information to complete the table. [2]

(ii) Find the difference between the minimum and maximum temperatures on Thursday.

Answer(a)(ii) .... °C [1]

Mark Scheme:

(a)	(i)	−3	1	
		9	1	
	(ii)	9	1	ignore minus sign

4   The table below shows the average monthly temperatures (°C) in the Islas Orcadas, Argentina.

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	1	0.5	–1	–5	–8	–9	–8	–5	–3	–1	0.5

(a) Work out the difference between the highest and the lowest average monthly temperature.

Answer(a) ....°C   [1]

(b) The highest recorded temperature for July is x °C.
This is 21 °C above the average for July shown in the table.
Work out the value of x.

Answer(b) x =   [1]

Mark Scheme:

(a)	10 (allow −10)	1	
(b)	12	1	

=   <   >

5   Choose one of the symbols given above to complete each of the following statements.

When $x = 6$ and $y = -7$, then

(a) x .... *y* [1]

(b) x² .... *y²* [1]

(c) y - x.....................*x - y* [1]

Mark Scheme:

(a)	>	1	
(b)	<	1	
(c)	<	1	
		[15]	

6   The temperature at noon at an Antarctic weather centre was –15 °C.
     At midnight it had fallen by 12 °C.
     What was the temperature at midnight?

                                        Answer .... °C [1]

Mark Scheme:

	−27	1	