

Questions 1 to 3 are about temperatures in different parts of the world.

This table shows the temperatures for one day in January.

City	Max °C	Min °C
Athens	12	5
London	7	0
Moscow	-10	-16
New York	1	-6
Oslo	-18	-23
Paris	6	-2
Sydney	29	25

1. Which city had the lowest temperature?

- A London
- B New York
- C Oslo
- D Sydney

2. Which city had the greatest range of temperatures?

- A Athens
- B Moscow
- C Oslo
- D Paris

3. What is the difference between the maximum temperature in Sydney and the maximum temperature in Oslo?

- A 11°C
- B 37°C
- C 46°C
- D 47°C

Use the information below for questions 4 and 5.
The table summarises the income and costs of producing a play

ITEM	£
Printing costs (tickets, posters, programmes)	95
Cost of hire of hall (rehearsals and performances)	125
Cost of hiring lights and costumes	310
Refreshment sales	42
Refreshment costs	18
Ticket sales	1840

4. What profit was made on the refreshments?

A £60

C £34

B £24

D £42

5. Which of these calculations gives the overall profit?

A £ $(95 + 125 + 310 + 18 - 1\ 840 - 42)$

B £ $(95 + 125 + 310 + 18) - (1\ 840 + 42)$

C £ $(1\ 840 + 42 - 95 + 125 + 310 + 18)$

D £ $(1\ 840 + 42) - (95 + 125 + 310 + 18)$

6. Maria is doing research into food storage temperatures for her catering course. She finds the following table in a book.

8°C	By law, perishable goods for public consumption must not be stored above this temperature.
5°C	By law, this is the highest temperature for very high risk food in a fridge.
3°C	Ideal temperature for a domestic refrigerator.
- 6°C	One star rated freezer (*)
-12°C	Two star rated freezer (**)
-18°C	Three star rated deep-freeze (***)

Her domestic refrigerator has a fault and is 4°C higher than the ideal temperature.

What is the difference in temperature between her domestic refrigerator and the three star rated deep-freeze if the deep-freeze is at the correct temperature?

A 17°C

C 25°C

B 19°C

D 27°C

Use the information below for questions 7 and 8.
The table shows the latest three-monthly summary of receipts and payments for 'SN Sports'.

Cash flow in £000s				
	Jul	Aug	Sep	Total
Receipts				
Cash from sales	120.3	40.5	75.2	236.0
Other income	9.2	4.2	5.0	18.4
Totals	129.5	44.7	80.2	254.4
Payments				
Materials from suppliers	50.6	27.0	70.4	148.0
Wages and salaries	13.4	15.0	13.6	42.0
Overheads	23.0	11.0	12.0	51.0
Capital expenditure	5.0	8.0	2.0	15.0
Totals	92.0	66.0	98.0	256.0

7. Which of these methods are checks for the Total Receipts for the 3 months?

method 1 $254.4 - 18.4 = 236.0$

method 2 $92.0 + 66.0 + 98.0 = 256.0$

method 3 $120.3 + 40.5 + 75.2 = 236.0$

method 4 $254.4 - 129.5 - 44.7 = 80.2$

A methods 1 and 2

C methods 3 and 4

B methods 2 and 3

D methods 1 and 4

8. Under 'Payments', what level of accuracy has been used in the figures for 'Materials from suppliers'?

A nearest 10p

C nearest £100

B nearest £

D nearest £1000

9. The table shows part of an income account for a club. Entries in brackets are negative.

		Sub-total	Total
subscriptions	£411.43		
donations	£ 29.50		
net activities	(£37.35)		
		£402.58	
bank interest	£16.23		
bank charges	(£17.66)		
		(£1.43)	
Overall total			402.15

There is an error in one of the entries. Which entry is wrong?

A £402.58

C £402.15

B £1.43

D you cannot say

Answer sheet and teachers' notes

OHTs: Level 2 negative number sample exam questions.

- 1 – C Oslo
- 2 – D Paris
- 3 – D 47°C
- 4 – B £24
- 5 – D £ (1 840 + 42) – (95 + 125 + 310 + 18)
- 6 – C 25°C
- 7 – D methods 1 and 4
- 8 – C nearest £100
- 9 – A £402.58

Main Curriculum Links

N1/L2.1 Read, write, order and compare positive and negative numbers of any size in a practical context.

(c) Understand the meaning of negative numbers in a practical context, e.g. temperature below zero, loss in trading.

N1/L2.2 Carry out calculations with numbers of any size using efficient methods.

(c) Know and use strategies to check answers.

A set of twelve negative number practice questions (in smaller print, suitable for homework etc.) is available on our site at:

<http://members.aol.com/twittwoo/mathpdfs/l2negnos.pdf>

A set of five different number lines (blank, 0 to 10, -10 to 10, etc.) is available on our site at:

<http://members.aol.com/twittwoo/mathpdfs/nlines1.pdf>