

Level 2 Whole Number Questions

Level 2 Adult Numeracy questions: Negative numbers (N1)

Allow about 25 minutes.

You may NOT use a calculator. Bilingual dictionaries may be used.

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

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

4. 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 |

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

Use the information below for questions 10 and 11.

The table shows the latest three-monthly summary of receipts and payments for 'SN Sports'.

| Cash flow in £000s | | | | |
|--------------------------|--------------|-------------|-------------|--------------|
| | July | August | September | 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 |

10. 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
B methods 2 and 3

- C** methods 3 and 4
D methods 1 and 4

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

- A** nearest 10p
B nearest £

- C** nearest £100
D nearest £1000

12. 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
B £1.43

- C** £402.15
D you cannot say

Answers

| | | | | | | |
|---|---|---|----|----|----|-------|
| 1 | 2 | 3 | 4 | 5 | 6 | |
| | | | | | | |
| 7 | 8 | 9 | 10 | 11 | 12 | Total |
| | | | | | | |

Tutor Comments

Answer sheet and teaching notes.

Level 2: Whole numbers (negative numbers).

- 1 – C Oslo
- 2 – D Paris
- 3 – D 47°C
- 4 – D $\pounds(1\ 840 + 42) - (95 + 125 + 310 + 18)$
- 5 – C $\pounds397$
- 6 – D $\pounds401$
- 7 – A $-\pounds99$
- 8 – C $\pounds99$
- 9 – C 25°C
- 10 – D methods 1 and 4
- 11 – C nearest $\pounds100$
- 12 – A $\pounds402.58$

Allow about 20 minutes