

Level 2 Whole Number Questions

Level 2 Adult Numeracy questions: Whole numbers (N1) – four operations (no negative numbers), problem solving, substitution.

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

N1/L2.2 Carry out calculations with numbers of any size using efficient methods. (c) know and use strategies to check answers, e.g. approximate calculations, estimation

N1/L2.4 Evaluate expressions and make substitutions in given formulae in words and symbols to produce results (a) understand that words and symbols in expressions and formulae represent variable quantities (numbers) (b) understand that the contents of brackets must be worked out first

1. Chris buys 4 CDs at £13.99 each. He gives the cashier £60.
Which method would give Chris the closest estimate to let him check his change?

A $60 - 13 \times 4$

B $60 - 4 - 13$

C $60 - 4 + 14$

D $60 - 4 \times 14$

2. Betty plans to hire a minibus for a 4-day scout camp. She estimates that she will do a total of 125 miles. The hire company charges £30 per day plus 15p per mile. How much will the minibus cost for the trip?

A £121.87

B £138.75

C £180.00

D £245.00

3. A pop concert has an audience of 8 496 people. Two thirds of the people at the concert pay a £15 entrance fee while the remainder pay a reduced rate of £7. What is the income from the concert to the nearest thousand pounds?

A £80 000

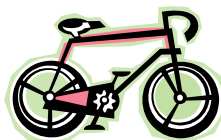
B £82 000

C £104 800

D £105 000

4. Greg went on a cycle ride. He cycled 30 miles in $2\frac{1}{2}$ hours, then returned home more slowly. His return journey took him 2 hours 45 minutes. He finds his average speed for the first 30 miles using this formula

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$



What was Greg's average speed for the 30 miles?

A 5 miles per hour

B 12 miles per hour

C 15 miles per hour

D 33 miles per hour

Questions 5 to 7 are about a camping holiday.

Some friends are planning a camping holiday in May.

5. The table shows information on the prices of some of the campsites available.

Campsite Information		
Site	Price per night	Discounts
Happy Camper	£10 per tent	50% off third night
Rovers' Rest	£4 per tent plus £2 per person	–
Vibram Farm	£15 per tent	25% off all nights in May
Wood Nook	£2 per tent plus £4 per person	–

There are 4 people in the group and they are taking 2 tents for 3 nights in May. They calculate that Rovers' Rest is the cheapest for them and Vibram Farm would be the most expensive.

How much would they save by going to Rovers' Rest rather than Vibram Farm?

- A £6.50
- B £8.50
- C £19.50
- D £25.50



6. Their car uses 1 litre of petrol to travel 14.8 kilometres. The campsite is 88 kilometres away from their home town. They estimate how much fuel they will need for the trip there and back.

Which of these 4 attempts gives the closest estimate of the fuel required?

- A $90 \div 15 = 6$ litres
- B $90 \div 10 = 9$ litres
- C $180 \div 15 = 12$ litres
- D $180 \div 10 = 18$ litres

7. One of the items on their list of supplies is 6 yoghurts. The supermarket has several special offers. Which would work out cheapest?

- A Original price 26p: buy one, get a second half-price
- B Original price 26p: buy two, get the third free
- C Original price 27p: one third off
- D Original price 28p: 25% off

8. Alison has a picture that she wants framing. The cost is £5.99 plus an amount that depends on the length of framing needed. The man in the shop says it will cost "£5.99, plus 1.9 times 8.99, that's £25.07 altogether".

Which of the following calculations could she use to check.

- A $(5 + 2) \times 8 =$
- B $(6 + 2) \times 9 =$
- C $5 + (2 \times 8) =$
- D $6 + (2 \times 9) =$

9. Jenny has a part-time job in a restaurant. She gets paid £3.80 per hour. On Sundays she is paid one and a half times as much per hour. On Bank Holidays she is paid twice as much per hour.

She works 5 hours on Saturday, 3 hours on Sunday and 4 hours on Bank Holiday Monday. How much does she earn altogether?

- A £46.60
- B £66.50
- C £68.40
- D £70.30

Answer sheet

Level 2: Whole numbers (four operations, substitution, problem solving)

- 1 – **D** $60 - 4 \times 14$
- 2 – **B** £138.75
- 3 – **D** £105 000
- 4 – **B** 12 miles per hour
- 5 – **C** £19.50
- 6 – **C** $180 \div 15 = 12$ litres
- 7 – **B** Original price 26p: buy two, get the third free
- 8 – **D** $6 + (2 \times 9) =$
- 9 – **B** £66.50
- 10 – **D** £197 500
- 11 – **B** cost in pounds = $10 + (2.5 \times 5) + (5 \times 5)$
- 12 – **A** 400
- 13 – **B** $20 + (5 \times 5)$

Allow about 25 minutes