

GCSE Maths: Number problems and checking answers (Higher): answers

GCSE Maths - Number Basics - Higher - Lesson 1.9

Answers. Final answers to the worksheet questions. Full step-by-step solutions for every question are free at websink.site/gcse/maths/ch01-number-basics/higher/number-problems-and-checking-answers/

Exercise 1K Number problems Non-calculator

- 1 Adult tickets for a zoo cost £12.50 and child tickets cost £7.25. A family buys 2 adult tickets and 3 child tickets.

(a) Work out the total cost.

Answer: £46.75

(b) They pay with two £20 notes and a £10 note. Work out the change.

Answer: £3.25

- 2 Dan saves £8.50 each week. How many weeks will it take him to save £255?

Answer: 30

- 3 Cupcake cases are sold in packs of 12. Mia needs 150 cases. Each pack costs £1.35. How much does she pay?

Answer: £17.55

- 4 A 250 g jar of jam costs £1.80. A 400 g jar of the same jam costs £2.60. Which jar is better value? Show your working.

Answer: The 400 g jar

- 5 An electricity meter reading goes from 45 821 to 46 309 units. Each unit costs 24.5p. Work out the total cost in pounds.

Answer: £119.56

- 6 A school buys 28 calculators at £7.95 each. How much does it spend?

Answer: £222.60

- 7 A car travels 360 km and uses 1 litre of fuel for every 12 km. Fuel costs £1.45 per litre. Work out the cost of the fuel.

Answer: £43.50

- 8 A film starts at 19:45 and lasts 2 hours 35 minutes. At what time does it finish?

Answer: 22:20

- 9 A recipe needs 350 g of flour. A bag has 1.5 kg of flour. How many whole batches can be made from one bag?

Answer: 4 batches

- 10 Jon says that $4 \times 3 + 2 = 20$ because " $4 \times 5 = 20$ ". Explain his mistake and give the correct answer.

Answer: 14

- 11** Use an estimate to show that $4872 \div 24 = 20.3$ must be wrong.

Answer: The estimate is about 200, not 20

- 12** A room is 5.4 m long and 3.5 m wide. Carpet costs £12.50 per square metre. Work out the cost of carpeting the whole floor.

Answer: £236.25

- 13** An office uses 5 reams of paper in 4 weeks. Each ream has 500 sheets. How many sheets does the office use in 52 weeks?

Answer: 32 500 sheets

- 14** Option A: 3 tickets at £8.40 each plus a booking fee of £2.50 for the whole order. Option B: 3 tickets at £9.20 each with no fee. Show that Option B is cheaper, and find by how much.

Answer: Option B is cheaper by £0.10

- 15** At a school fair, 250 raffle tickets are sold for £1.50 each. The prizes cost £48.75. Work out the profit.

Answer: £326.25

- 16** Zoe has 24 sweets. She shares them equally between 5 friends and keeps the remainder. What is the smallest number of extra sweets she needs so that nothing is left over to keep? Explain.

Answer: 1 more sweet