

# 11+ Practice Test Answers

## 11+ Maths Test 49

Question	Answer	Explanation	Marks
1	50 litres	<p>The correct answer is 50 litres.</p> <p>A typical car fuel tank has a capacity between 45 and 65 litres. 50 litres is a reasonable estimate within this range.</p> <p>5 litres is far too small for a car's fuel tank, as this would only allow for a very short driving distance.</p> <p>500 litres and 5 000 litres are both much too large. These capacities are more suitable for large trucks or industrial storage tanks, not a standard car.</p>	1
2	11 weeks	<p>To find out how many more weeks Amelia needs to save, we first need to calculate how much more money she needs to buy the book.</p> <p>The book costs £28, and Amelia already has £6 saved.</p> $£28 - £6 = £22$ <p>So, Amelia needs to save an additional £22.</p> <p>Amelia receives £2 pocket money each week.</p> <p>To find the number of weeks needed, we divide the additional amount needed by the weekly pocket money:</p> $£22 \div £2 = 11 \text{ weeks}$ <p>Therefore, it will take Amelia 11 more weeks to save enough money to buy the book.</p>	1
3	Perimeter	<p>The perimeter of a square is the distance around its edge, which is the sum of the lengths of all four sides.</p> <p>Since a square has four equal sides, the perimeter can be calculated by multiplying the length of one side by 4.</p> <p>For example, if the length of one side of a square is 5 cm, the perimeter would be: <math>5 \text{ cm} \times 4 = 20 \text{ cm}</math>.</p> <p>The diagonal is a line segment that connects opposite corners of the square, the area is the space inside the square, and the volume is a measure of three-dimensional space, which does not apply to a two-dimensional shape like a square.</p> <p>Therefore, the correct answer is 'Perimeter'.</p>	1
4	09:15 and 13:52	<p>To solve this problem, we need to add the duration of the journey (4 hours and 37 minutes) to the departure time to find the correct arrival time.</p> <p>Let's check each option:</p> <ol style="list-style-type: none"><li>09:15 + 4 hours and 37 minutes = 13:52 (correct)</li><li>10:30 + 4 hours and 37 minutes = 15:07 (incorrect)</li><li>11:45 + 4 hours and 37 minutes = 16:22 (incorrect)</li><li>12:20 + 4 hours and 37 minutes = 16:57 (incorrect)</li></ol> <p>Therefore, the correct answer is 09:15 and 13:52.</p>	1

5	547.56	<p>To find the total cost of the trip, we need to multiply the number of students by the cost per student.</p> <p>Number of students: 234 Cost per student: £2.34</p> $234 \times 2.34 = 547.56$ <p>Therefore, the total cost of the trip is £547.56.</p>	1
6	30 cm	<p>To find the width of the shipping container, we need to use the formula for the volume of a rectangular prism:</p> <p>Volume = length <math>\times</math> width <math>\times</math> height</p> <p>We know the volume is <math>67,500 \text{ cm}^3</math>, the length is 75 cm, and the height is 30 cm. Let's substitute these values into the formula:</p> $67,500 = 75 \times \text{width} \times 30$ <p>To solve for the width, we divide both sides by <math>(75 \times 30)</math>:</p> $67,500 \div (75 \times 30) = \text{width}$ $67,500 \div 2,250 = \text{width}$ $30 = \text{width}$ <p>Therefore, the width of the shipping container is 30 cm.</p>	1
7	18 cm	<p>The most likely length of a standard pencil is 18 cm.</p> <p>A length of 1.8 m would be far too long for a pencil, as this is equivalent to 180 cm. Most pencils are much shorter than this.</p> <p>Similarly, 1.8 km is an extremely large length, equal to 1,800 m or 180,000 cm. This is an unrealistic size for a pencil.</p> <p>Likewise, 1850 mm is far too long, it is equivalent to 185 cm.</p>	1
8	0.75 kg	<p>The recipe states that 250 grams of flour are needed for 48 cookies.</p> <p>To find the amount of flour needed for 144 cookies, we can set up a proportion:</p> $48 \text{ cookies} / 250 \text{ grams} = 144 \text{ cookies} / x \text{ grams}$ <p>Cross-multiplying, we get:</p> $48x = 250 \times 144$ $48x = 36,000$ $x = 36,000 / 48$ $x = 750 \text{ grams}$ <p>Since the question asks for the answer in kilograms, we need to convert 750 grams to kilograms.</p> <p>There are 1,000 grams in 1 kilogram, so:</p> $750 \text{ grams} = 750 / 1,000 \text{ kilograms} = 0.75 \text{ kilograms}$ <p>Therefore, approximately 0.75 kilograms of flour will be needed to make 144 cookies.</p>	1

<p>9</p>	<p>£9.15</p> <p>To find out how much money Liam has left, we need to add up all the expenses and subtract the total from the initial amount he had.</p> <p>Expenses:</p> <p>Decorations: £12.50          Cake: £18.75          Party favours: £9.60</p> <p>Total expenses: <math>£12.50 + £18.75 + £9.60 = £40.85</math></p> <p>Initial amount: £50.00          Total expenses: £40.85</p> <p>Remaining money: <math>£50.00 - £40.85 = £9.15</math></p> <p>Therefore, Liam has £9.15 left after purchasing the items for his friend's birthday party.</p>	<p>1</p>
<p>10</p>	<p>Isosceles Trapezium</p> <p>An isosceles trapezium is the correct answer.</p> <p>It has one pair of parallel sides (the parallel sides are of different lengths, otherwise it would be a parallelogram).</p> <p>It also has exactly two lines of symmetry. These pass through the midpoints of the parallel sides and are perpendicular to them.</p> <p>A square has four lines of symmetry and two pairs of parallel sides. A rectangle has two lines of symmetry and two pairs of parallel sides. A rhombus has two lines of symmetry and two pairs of parallel sides.</p> <p>Therefore, the isosceles trapezium is the only shape that satisfies both conditions given in the question.</p>	<p>1</p>