11+ Practice Test Answers

11+ Maths Test 48

Question	Answer	Explanation	Marks
1	8	Initially, Amelia had 7 mystery novels and 4 science fiction novels. 7 + 4 = 11 novels in total. After lending 3 mystery novels to her friend, Amelia will have: 7 - 3 = 4 mystery novels left. She still has all 4 science fiction novels. So, in total, Amelia will have: 4 (remaining mystery novels) + 4 (science fiction novels) = 8 novels. Therefore, the correct answer is 8.	1
2	£11.81	To calculate the mean amount spent, we need to add up all the amounts and divide by the number of friends. £12.50 + £8.75 + £15.20 + £10.80 = £47.25 There are 4 friends in total, so we divide the total amount by 4: £47.25 ÷ 4 = £11.8 125 Rounding to the nearest pence, the mean amount spent by the friends is £11.81.	1
3	four	To find the number of boxes of tiles needed, we first need to calculate the total area of the bathroom floor. The floor is a rectangle, so we can use the formula: Area = length × width Area = 3 m × 2 m = 6 m^2 Now that we know the total area to be covered, we can determine the number of boxes required. Each box of tiles covers an area of 1.5 m^2. Number of boxes = Total area ÷ Area covered by each box Number of boxes = 6 m^2 ÷ 1.5 m^2 = 4 Therefore, Olivia will need to purchase four boxes of tiles to complete the job.	1
4	£40	To find the total cost of the cupcakes, we need to multiply the cost per cupcake by the number of classmates. Cost per cupcake: £1.25 Number of classmates: 32 £1.25 × 32 = £40 Therefore, it will cost Emma a total of £40 to buy cupcakes for her 32 classmates.	1

5	120	To find the total points James scores, we need to multiply the number of baskets he scores by the points awarded for each basket. James scores 24 baskets, and each basket is worth 5 points. 24 × 5 = 120 Therefore, James scores a total of 120 points in the game.	**1**
6	9 032.1	To find the new number of loaves sold per week, we need to increase the current number by 15%. First, convert the percentage to a decimal by dividing by 100: 15 ÷ 100 = 0.15 Now, calculate the increase in the number of loaves: 7,854 × 0.15 = 1,178.1 Finally, add this increase to the original number of loaves: 7,854 + 1,178.1 = 9,032.1 Therefore, after increasing production by 15%, the bakery will sell 9,032.1 loaves of bread per week.	**1**
7	100	Let's solve this step by step: 1. The skyscraper is 10 times taller than the tree. So, if the skyscraper is 200 metres tall, the tree must be 200 ÷ 10 = 20 metres tall. 2. The tree is 5 times taller than the lamppost. So, if the tree is 20 metres tall, the lamppost must be 20 ÷ 5 = 4 metres tall. 3. The lamppost is 25 times shorter than Big Ben. This means that Big Ben is 25 times taller than the lamppost. So, if the lamppost is 4 metres tall, Big Ben must be 4 × 25 = 100 metres tall. Therefore, the correct answer is that Big Ben is 100 metres tall.	**1**
8	80 litres	First, let's find the minimum total volume of water used: 29 buckets × 20 litres = 580 litres. Since the tank can only hold 500 litres, any extra water is wasted. Therefore, 580 - 500 = 80 litres of water have been wasted. This assumes each bucket contained exactly 20 litres - if the buckets held more than 20 litres each, even more water would have been wasted.	**1**
9	15g	To find the amount of flour needed for a single cupcake, we need to divide the total amount of flour by the number of cupcakes the recipe makes. The recipe requires 180g of flour to make 12 cupcakes. 180g ÷ 12 = 15g Therefore, to make a single cupcake using this recipe, you would need 15g of flour.	**1**

10	36 litres	To find the amount of water poured into the bucket in half an hour, we need to multiply the rate of water flow by the time in minutes. First, let's convert half an hour to minutes: Half an hour = 30 minutes Now, we can calculate the amount of water poured into the bucket: Water poured = Rate of water flow × Time Water poured = 1.2 litres/minute × 30 minutes Water poured = 36 litres Therefore, the tap will pour 36 litres of water into the bucket in half an hour.	1