11+ Practice Test Answers

11+ Maths Test 32

Question	Answer	Explanation	Marks
1	2	Amelia starts with 12 sweets and gives half of them to Liam. Half of 12 is 12 ÷ 2 = 6, so Liam receives 6 sweets. Liam then gives a third of the sweets he received to his sister Olivia. A third of 6 is 6 ÷ 3 = 2, so Olivia receives 2 sweets. Therefore, the correct answer is that Olivia has 2 sweets.	1
2	68 full boxes, 4 cupcakes left over	To find the number of full boxes and leftover cupcakes, we need to divide the total number of cupcakes by the number of cupcakes each box can hold. 616 ÷ 9 = 68 remainder 4 This means that 68 full boxes can be made, and there will be 4 cupcakes left over.	1
3	£21.15	To find out how much each person paid, we need to divide the total cost of the meal by the number of friends. Total cost of the meal: £84.60 Number of friends: 4 £84.60 ÷ 4 = £21.15 Therefore, each person paid £21.15 for their share of the meal.	1
4	1 638	The average number of loaves produced per week is 1,638 loaves. To find this, you need to calculate the total number of loaves produced in 49 days (234 × 49 = 11,466 loaves), then divided this by the number of weeks (49 ÷ 7 = 7 weeks) to get the weekly average: 11,466 ÷ 7 = 1,638 loaves per week.	1
5	£0.75	To find the cost of each cupcake, we need to divide the total cost of the box by the number of cupcakes in the box. Total cost of the box = £15 Number of cupcakes in the box = 20 Cost per cupcake = Total cost ÷ Number of cupcakes Cost per cupcake = £15 ÷ 20 Cost per cupcake = £0.75 Therefore, each individual cupcake costs £0.75.	1

6	52.25 m^2	Let the length of the garden be x metres. The width is 4 metres less than the length, so the width is (x - 4) metres. The perimeter is 30 metres, so: 2(length) + 2(width) = 30 2x + 2(x - 4) = 30 2x + 2x - 8 = 30 4x - 8 = 30 4x = 38 x = 9.5 So, the length is 9.5 metres and the width is 9.5 - 4 = 5.5 metres. The area of a rectangle is length × width. Area = 9.5 × 5.5 = 52.25 square metres. Therefore, the area of the garden is 52.25 square metres.	**1**
7	8 batches	To find out how many batches Liam needs to make, we need to divide the total number of cookies by the number of cookies in each batch. Total cookies: 120 Cookies per batch: 15 120 ÷ 15 = 8 Therefore, Liam will need to make 8 batches of cookies to reach his goal of 120 cookies for the school fundraiser.	**1**
8	13:47	To find the latest time James can start walking his dog, we need to work backwards from the train departure time. Train departs at 14:25 Subtract driving time of 18 minutes: 14:25 - 00:18 = 14:07 Subtract dog walking time of 20 minutes: 14:07 - 00:20 = 13:47 Therefore, the latest time James can start walking his dog is 13:47.	**1**
9	1 213	To find the difference between the highest and second highest attendances, we first need to identify the two highest values. The three attendances are: 85,792, 87,451, and 86,238. The highest attendance is 87,451, and the second highest is 86,238. To calculate the difference, we subtract the second highest value from the highest value: 87,451 - 86,238 = 1,213 Therefore, the difference between the match with the highest attendance and the match with the second highest attendance is 1,213.	**1**

10	108°	To find the measure of each interior angle in a regular pentagon, we can use the formula: (n - 2) × 180° ÷ n where n is the number of sides in the polygon. For a pentagon, n = 5. So, let's substitute this value into the formula: (5 - 2) × 180° ÷ 5 3 × 180° ÷ 5 540° ÷ 5 = 108° Therefore, each interior angle in a regular pentagon measures 108°.	**1**