11+ Practice Test Answers

11+ Maths Test 26

Question	Answer	Explanation	Marks
1	0.12 m	To find out how much Liam fell short of the qualifying height, we need to subtract his jump height from the required qualifying height. Qualifying height: 1.5 m Liam's jump height: 1.38 m Shortfall = Qualifying height - Liam's jump height Shortfall = 1.5 m - 1.38 m Shortfall = 0.12 m Therefore, Liam fell short of the qualifying height by 0.12 m.	1
2	22:45	To find the time in Tokyo when Sarah's flight lands, we need to: 1. Add the flight duration to the departure time in London to get the landing time in London. 2. Add the time difference between London and Tokyo to the landing time in London to get the landing time in Tokyo. Step 1: London departure time (10:45) + Flight duration (12 hours) = London landing time (22:45) Step 2: London landing time (22:45) + Time difference between London and Tokyo (9 hours) = Tokyo landing time (07:45 the next day, which is the same as 22:45 on the day of arrival in Tokyo, due to the 24-hour clock) Therefore, when Sarah's flight lands in Tokyo, the time there will be 22:45.	1
3	32 cm	The base of a square-based pyramid is a square. To find the perimeter of a square, we need to multiply the length of one side by 4. Given: - The base edge length is 8 cm. Calculation: Perimeter of the base = 8 cm × 4 = 32 cm Therefore, the perimeter of the base of the square-based pyramid is 32 cm.	1
4	80°	In a kite that has one line of symmetry, we know that two of its angles are equal to each other. Given that we have angles of 60° and 110°, either the 60° or the 110° must be the angle that appears twice in the kite. If 60° appears twice, then we have 60° + 60° + 110° + x = 360°, making x = 130°. Alternatively, if 110° appears twice, then we have 110° + 110° + 60° + x = 360°, making x = 80°. Therefore, the remaining angle must be either 80° or 130°. As 130° isn't an option, the answer has to be 80°.	1

5	5 weeks	To find out how many weeks it will take Amelia to save enough money, we need to calculate the amount she still needs to save and divide it by the amount she saves each week. The book costs £27, and Amelia has already saved £12. £27 - £12 = £15 So, Amelia still needs to save £15. If she saves £3 per week, we can calculate the number of weeks by dividing the amount she needs to save by the amount she saves each week: £15 ÷ £3 = 5 Therefore, it will take Amelia 5 weeks to save enough money to buy the book.	**1**
6	18:40	To determine when James should leave his house, we need to work backwards from the time he wants to arrive at the cinema. James wants to arrive 15 minutes before the movie starts at 19:30. So, he should aim to be at the cinema by 19:15. Before entering the cinema, James needs 10 minutes to find a parking space and walk to the entrance. So, he should arrive at the cinema parking lot by 19:05. It takes James 25 minutes to drive to the cinema. Therefore, he should leave his house 25 minutes before 19:05. 25 minutes before 19:05 is 18:40. In summary, James should leave his house at 18:40 to arrive at the cinema 15 minutes before the movie starts at 19:30.	**1**
7	15 cm	To find the length of each piece of ribbon, we need to divide the total length of the ribbon by the number of equal pieces. Total length of ribbon = 120 cm Number of equal pieces = 8 Length of each piece = 120 cm ÷ 8 = 15 cm Therefore, each piece of ribbon is 15 cm long.	**1**
8	0.5 m	To find the length of Sarah's model, we need to divide the actual length of the swimming pool by the scale factor. The actual length of the swimming pool is 25 metres, and the model is 50 times smaller. 25 metres ÷ 50 = 0.5 metres Therefore, the length of Sarah's model is 0.5 metres.	**1**

9	32 minutes	To find out how long Sarah spent working on her science project, we need to calculate the total time from when she started her homework to when she finished, then subtract the time she spent on maths and her break. Sarah started her homework at 16:12 and finished working on her science project at 17:03. The total time can be calculated by: 17:03 - 16:12 = 51 minutes Now, we subtract the time she spent on maths (14 minutes) and her break (5 minutes): 51 - 14 - 5 = 32 minutes Therefore, Sarah spent 32 minutes working on her science project.	**1**
10	30 cushion covers	To find out how many cushion covers Liam can make, we need to convert the fabric length from metres to centimetres and then divide by the length of each piece. 12 metres = 12 × 100 cm = 1 200 cm 1 200 cm ÷ 40 cm = 30 Therefore, Liam can make 30 cushion covers from the 12 metres of fabric.	**1**