11+ Practice Test Answers

11+ Maths Test 13

Question	Answer	Explanation	Marks
1	8	A pyramid has 8 edges in total. The square base contributes 4 edges, and the 4 triangular faces that meet at the apex contribute 1 edge each. Therefore, the total number of edges is: 4 (from the base) + 4 × 1 (from the triangular faces) = 4 + 4 = 8 edges in total.	1
2	£450	To calculate how much money John earned last week, we need to multiply his hourly rate by the number of hours he worked. Hourly rate: £12.50 Hours worked: 36 £12.50 × 36 = £450 Therefore, John earned £450 last week.	1
3	£36.24	To find out how much more money Sarah needs to save, we need to: 1. Add up the amount she has already saved: £135.50 + £78.25 = £213.75 2. Subtract the total amount she has saved from the cost of the bicycle: £249.99 - £213.75 = £36.24 Therefore, Sarah needs to save an additional £36.24 to be able to buy the bicycle.	1
4	£73.25	To find the total amount of money Amir has, we need to add the money he saved in his piggy bank to the money he received for his birthday. Money in piggy bank: £32.50 Money from grandparents: £25.00 Money from aunt: £15.75 £32.50 + £25.00 + £15.75 = £73.25 Therefore, the total amount of money Amir has now is £73.25.	1
5	84.12	To find how many times longer the real Flying Scotsman is compared to the model, we need to divide the real length by the model length. First, we need to convert the real length from metres to centimetres: 21.03 metres = 2 103 centimetres Now, we can divide the real length by the model length: 2 103 cm ÷ 25 cm = 84.12 Therefore, the real Flying Scotsman is 84.12 times longer than the model.	1

6	17th June	To find the Saturday closest to the 23rd of June, we need to look at the Saturdays before and after that date. The Saturday before the 23rd of June is the 17th of June. The Saturday after the 23rd of June is the 1st of July. The 17th of June is 6 days before the 23rd, while the 1st of July is 8 days after the 23rd. Since 6 days is a shorter time period than 8 days, the 17th of June is closer to the 23rd of June than the 1st of July. Therefore, Samantha is most likely to hold her party on the 17th of June.	**1**
7	30	To find the number of students who checked out books, we need to use the information given about the average number of books per student and the total number of books checked out. The average number of books per student is 6, and the total number of books checked out is 180. To calculate the number of students, we can divide the total number of books by the average number of books per student: Number of students = Total books ÷ Average books per student Number of students = 180 ÷ 6 Number of students = 30 Therefore, 30 students checked out books from the library that week.	**1**
8	135°	To find the measure of each internal angle in a regular octagon, we need to divide the sum of the internal angles by the number of angles. The sum of the internal angles in an octagon is given as 1 080°, and a regular octagon has 8 sides and 8 angles. Therefore, the measure of each internal angle is: 1 080° ÷ 8 = 135° So, each internal angle in Amelia's stop sign measures 135°.	**1**
9	7 days	To find the number of days between Amelia's birthday and the day she received the present, we need to subtract the dates: 19th March - 12th March = 7 days Therefore, Amelia received her birthday present 7 days after her birthday.	**1**

10	36°	To find the value of x, we need to use the fact that the angles in a circle add up to 360°. Let's add up the angles of all the slices: Smallest slice: x Second smallest slice: $2x$ Second largest slice: $3x$ Largest slice: $4x$ Total angle: $x + 2x + 3x + 4x = 10x$ Since the total angle must equal 360°, we can set up an equation: $10x = 360°$ Dividing both sides by 10, we get: $x = 36°$ Therefore, the smallest slice has an angle of 36°, the second smallest slice has an angle of 72°, the second largest slice has an angle of 108°, and the largest slice has an angle of 144°.	1