11+ Practice Test Answers

11+ Maths Test 16

Question	Answer	Explanation	Marks
1	10	To find out how many times taller the real wedding cake is compared to the model cake, we need to divide the height of the real cake by the height of the model cake. Height of the real cake: 2.5 m Height of the model cake: 0.25 m 2.5 ÷ 0.25 = 10 Therefore, the real wedding cake will be 10 times taller than the model cake.	1
2	The triangle is invalid.	In a triangle, the sum of all three interior angles is always 180°. If two of the angles add up to 180°, then the third angle must be 0°, which is not possible. Therefore, the shape is invalid.	1
3	2 750 ml	To find out how much orange juice is left, we need to subtract the amounts Samantha used from the original quantity. Original quantity: 5 litres = 5 000 ml Amount poured into the pitcher: 1.5 litres = 1 500 ml Amount used for the smoothie: 750 ml Total used: 1 500 ml + 750 ml = 2 250 ml Orange juice left: 5 000 ml - 2 250 ml = 2 750 ml Therefore, there are 2 750 ml of orange juice left in the original jug.	1
4	£65.35	To calculate the additional amount Sarah needs to save, we need to subtract the amount she has already saved from the total cost of the train ticket. Train ticket cost: £157.80 Amount Sarah has saved: £92.45 Additional amount needed = £157.80 - £92.45 = £65.35 Therefore, Sarah needs to save an additional £65.35 to afford the train ticket from London to Edinburgh.	1
5	£1.20	To find the average (mean) price of a 2-litre bottle of milk, we need to add up all the prices and divide by the number of supermarkets. £1.20 + £1.15 + £1.25 = £3.60 £3.60 ÷ 3 = £1.20 Therefore, the average price of a 2-litre bottle of milk across the three supermarkets is £1.20.	1

6	2 000	To find out how many times taller the real Eiffel Tower is compared to the model, we need to divide the height of the real tower by the height of the model. Height of the real Eiffel Tower = 300 metres Height of Sarah's model = 0.15 metres 300 ÷ 0.15 = 2 000 Therefore, the real Eiffel Tower is 2 000 times taller than Sarah's model.	1
7	0.18	To find out by how many seconds Amelia beat her previous personal best, we need to subtract her new time from her old personal best. Previous personal best: 12.47 seconds New time: 12.29 seconds 12.47 - 12.29 = 0.18 seconds Therefore, Amelia beat her previous personal best by 0.18 seconds.	1
8	£22.50	To find the average (mean) amount of money saved by the four friends, we need to add up all the amounts and divide by the number of friends. Emma: £18 Oliver: £25 Sophia: £12 Liam: £35 Total amount saved: £18 + £25 + £12 + £35 = £90 Number of friends: 4 Average amount saved: £90 ÷ 4 = £22.50 Therefore, the average amount of money saved by the four friends is £22.50.	1
9	138°	To find the size of the fifth angle, we need to use the fact that the sum of the angles in a pentagon is 540°. We can calculate this by subtracting the sum of the known angles from 540°: 105° + 92° + 87° + 118° = 402° 540° - 402° = 138° Therefore, the size of the fifth angle in the pentagon is 138°.	1
10	4:48 pm	The train's arrival time is given in the 24-hour clock format as 16:48. To convert this to the 12-hour clock format, we need to subtract 12 from the hours since 16 is greater than 12. 16 - 12 = 4 Therefore, in the 12-hour clock format, the train arrives in Manchester at 4:48 pm.	1