11+ Practice Test Answers

11+ Maths Test 1

Question	Answer	Explanation	Marks
1	£47.50	To find out how much more money Amelia needs to save, we need to subtract the amount she has already saved from the total cost of the bicycle. Total cost of the bicycle: £120 Amount Amelia has saved: £72.50 £120 - £72.50 = £47.50 Therefore, Amelia needs to save an additional £47.50 to be able to buy the new bicycle.	1
2	£15 + £11 + £13	To find the correct answer, we need to calculate the mean (average) for each combination of amounts and see which one does not equal £12.	1
3	3rd May	Amelia's birthday is on the 12th of April. Her parents said she can have a party in 3 weeks. To find the date of the party, we need to add 3 weeks to the 12th of April. 1 week after the 12th of April is the 19th of April. 2 weeks after the 12th of April is the 26th of April. 3 weeks after the 12th of April is the 3rd of May. Therefore, Amelia's birthday party will be held on the 3rd of May.	1
4	$6y - 15$	To simplify the expression $3(2y - 5)$, we need to multiply each term inside the parentheses by 3. First, multiply $2y$ by 3: $3 \times 2y = 6y$ Next, multiply -5 by 3: $3 \times -5 = -15$ Now, combine the like terms: $6y - 15$ Therefore, the expression $3(2y - 5)$ is equivalent to $6y - 15$.	1
5	16	To find the number of 500-gram bags John can fill with 8 kilograms of flour, we need to convert kilograms to grams and then divide the total grams by the size of each bag. First, convert 8 kilograms to grams: 8 kg × 1 000 g/kg = 8 000 grams Now, divide the total grams by the size of each bag: 8 000 grams ÷ 500 grams per bag = 16 bags Therefore, John will be able to fill 16 bags with 500 grams of flour each.	1

6	11	To find the minimum number of classes needed, we need to divide the total number of students by the maximum number of students allowed per class. Total students: 216 Maximum students per class: 20 216 ÷ 20 = 10.8 Since we cannot have a fraction of a class, we need to round up to the nearest whole number. 10.8 rounded up to the nearest whole number is 11. Therefore, the school will need a minimum of 11 classes to ensure there are no more than 20 students in each class.	**1**
7	(−1, 3)	To find the new coordinates of point D, we need to apply the same shift that was applied to point C. The shift in the x-coordinate from C to its new position is: 6 - 4 = 2 The shift in the y-coordinate from C to its new position is: 7 - 9 = -2 Applying the same shift to point D: x-coordinate of D: -3 + 2 = -1 y-coordinate of D: 5 + (-2) = 3 Therefore, the new coordinates of point D after the shift are (-1, 3).	**1**
8	8	To find out how many boxes of 27 cupcakes can be filled with 216 cupcakes, we need to divide 216 by 27. 216 ÷ 27 = 8 Therefore, the bakery can fill 8 boxes with 27 cupcakes each.	**1**
9	£19	To find the amount Sophia raised, we need to use the mean formula: Mean = (Sum of all values) ÷ (Number of values) We know the mean is £16 and there are 4 girls in total. So, we can set up an equation: 16 = (15 + 9 + 21 + Sophia's amount) ÷ 4 Multiply both sides by 4: 64 = 15 + 9 + 21 + Sophia's amount Add up the known amounts: 64 = 45 + Sophia's amount Subtract 45 from both sides: 64 - 45 = Sophia's amount 19 = Sophia's amount Therefore, Sophia raised £19.	**1**

10	3.07 m	The original length of the fabric roll is 3.75 m. Sarah cuts a piece that is 68 cm long. To subtract this length from the original length, we need to convert 68 cm to metres. 68 cm = 0.68 m (divide by 100 to convert from cm to m) Now we can subtract: 3.75 m - 0.68 m = 3.07 m Therefore, the remaining length of fabric on the roll is 3.07 m.	1