11+ Practice Test Answers
11+ Maths Test 14

Question	Answer	Explanation	Marks
1	201 miles	To find the average (mean) distance Amelia will travel between the cities, we need to add up all the distances and divide by the number of distances. The distances are: 215 miles, 189 miles, 203 miles, and 197 miles. Step 1: Add up all the distances: 215 + 189 + 203 + 197 = 804 miles Step 2: Count the number of distances: There are 4 distances in total. Step 3: Divide the total distance by the number of distances: 804 miles ÷ 4 = 201 miles Therefore, the average distance Amelia will travel between the cities is 201 miles.	1
2	£41	To calculate the cost of the taxi journey, we need to substitute the number of miles (m) into the formula: $C = 5 + 3m$ $C = 5 + 3(12)$ First, we calculate 3 × 12 = 36. Then, we add the booking fee of £5: $C = 5 + 36$ $C = £41$ Therefore, the cost of a 12-mile taxi journey is £41.	1
3	£11.70	To determine the total cost, we need to find out how many packs of croissants Sarah needs to buy. Since each pack contains 6 croissants and Sarah needs to serve 30 people, we can calculate the number of packs as follows: 30 ÷ 6 = 5 packs Now that we know Sarah needs to buy 5 packs, we can calculate the total cost: 5 packs × £2.34 per pack = £11.70 Therefore, the total cost of Sarah's purchase is £11.70.	1
4	200	To find the number of children going on the trip, we need to divide the total amount collected by the cost per child. Total amount collected: £1,600 Cost per child: £8 Number of children = 1,600 ÷ 8 = 200 Therefore, 200 children are going on the school trip to the zoo.	1

5	(4.5, 3.5)	To find the coordinates of the fountain, we need to find the midpoint of the rectangle. The x-coordinates of the corners are 2 and 7. The midpoint of these is (2 + 7) ÷ 2 = 4.5. The y-coordinates of the corners are 1 and 6. The midpoint of these is (1 + 6) ÷ 2 = 3.5. Therefore, the coordinates of the fountain are be (4.5, 3.5).	1
6	7	A dodecagon is a polygon with 12 sides. The question states that the polygon we are interested in has five sides fewer than a dodecagon. To find the number of sides, we subtract 5 from 12: 12 - 5 = 7 Therefore, the polygon in question has 7 sides, which makes it a heptagon.	1
7	600 ml	The recipe states that 200 ml of milk is needed to make 8 pancakes. Amelia wants to make 24 pancakes, which is 3 times the amount in the recipe (24 ÷ 8 = 3). Therefore, she will need 3 times the amount of milk stated in the recipe. To calculate this, we multiply the amount of milk in the recipe by 3: 200 ml × 3 = 600 ml So, Amelia needs 600 ml of milk to make 24 pancakes.	1
8	108°	To find the size of each angle in a regular pentagon, we need to divide the sum of the angles by the number of angles. The sum of the angles in a regular pentagon is given as 540°, and we know that a pentagon has 5 angles. Therefore, to calculate the size of each angle, we do: 540° ÷ 5 = 108° So, each angle in a regular pentagon measures 108°.	1

| 9 | 105 metres | To calculate the total distance Liam will travel, we need to consider the number of trips he will make and the distance of each trip.

Liam can carry 6 bricks at a time, and there are 24 bricks in total. To find the number of trips, we divide the total number of bricks by the number of bricks per trip:

24 ÷ 6 = 4 trips

For each trip, Liam travels from the garage to the patio and then back to the garage. This means the distance for each round trip is:

15 metres (garage to patio) + 15 metres (patio to garage) = 30 metres per round trip

Now, we multiply the number of round trips by the distance per round trip:

4 trips × 30 metres per trip = 120 metres

However, on the last trip, Liam doesn't need to return to the garage, so we need to subtract a single trip distance:

120 metres - 15 metres = 105 metres

Therefore, the total distance Liam travels to move all the bricks is 105 metres. | 1 |
| 10 | 800 g | To find the total weight of the fruit, we need to add the weights of each type of fruit together:

Strawberries: 325 g
Grapes: 280 g
Blueberries: 195 g

325 g + 280 g + 195 g = 800 g

Therefore, the total weight of the fruit Amelia needs for the salad is 800 g. | 1 |