11+ Practice Test Answers
11+ Maths Test 10

Question	Answer	Explanation	Marks
1	70 + 40h	To find the cost of a plumbing job on a weekend, we need to consider the increased call-out fee and hourly rate. The weekday call-out fee is £50, and the weekend call-out fee is increased by £20. So, the weekend call-out fee is £50 + £20 = £70. The weekday hourly rate is £30, and the weekend hourly rate is increased by £10. So, the weekend hourly rate is £30 + £10 = £40. If the job takes h hours, the total cost will be the weekend call-out fee plus the product of the weekend hourly rate and the number of hours worked. Therefore, the correct expression for the cost of a weekend plumbing job that takes h hours is: 70 + 40h.	1
2	55 days	To calculate the number of days Sarah spends training, we need to count the days from the 15th of April to the 9th of June, inclusive. April has 30 days, so from the 15th to the 30th of April, there are 16 days (30 - 15 + 1). May has 31 days, so we add 31 days for the entire month of May. In June, Sarah trains from the 1st to the 9th, which is 9 days (9 - 1 + 1). Therefore, the total number of days Sarah spends training is: 16 + 31 + 9 = 55 days.	1
3	£480	To calculate the total hire cost, we need to substitute the given values into the formula: $H = 25k + 10t$ Where k = 18 (number of children attending) and t = 3 (number of hours the bouncy castle is hired for). Substituting these values, we get: $H = 25 \times 18 + 10 \times 3$ $H = 450 + 30$ $H = £480$ Therefore, the total hire cost for the bouncy castle is £480.	1
4	£2.50	To find the cost of each cupcake, we need to divide the total amount earned by the number of cupcakes sold. Total amount earned: £1 250 Number of cupcakes sold: 500 Cost per cupcake = £1 250 ÷ 500 = £2.50 Therefore, each cupcake was sold for £2.50.	1

5	192 cm	To find the height of the scale model, we need to divide the actual height of Big Ben by the scale factor. The actual height of Big Ben is 9 600 cm, and the scale model will be 50 times smaller. So, we calculate: 9 600 cm ÷ 50 = 192 cm Therefore, the height of the scale model of Big Ben will be 192 cm.	1
6	£28.80	To find the total cost for 8 planks, we need to multiply the cost per plank by the number of planks. Cost per plank = £3.60 Number of planks = 8 Total cost = £3.60 × 8 Total cost = £28.80 Therefore, the total cost for 8 planks would be £28.80.	1
7	270 loaves	To find the number of loaves that can be made with 45 bags of flour, we need to set up a proportion. 15 bags of flour make 90 loaves, so we can write this as a ratio: 15 : 90 We want to find the number of loaves (x) that can be made with 45 bags of flour, so we can write this as another ratio: 45 : x Since these ratios are equivalent, we can set them equal to each other: 15 : 90 = 45 : x Cross multiply to solve for x: $15x = 90 \times 45$ $15x = 4{,}050$ $x = 4{,}050 \div 15$ $x = 270$ Therefore, the bakery can make 270 loaves of bread with 45 bags of flour.	1
8	£80	To find the average (mean) amount raised per person, we need to divide the total amount raised by the number of people who took part. Total amount raised = £9,600 Number of people = 120 Average amount raised per person = £9,600 ÷ 120 = £80 Therefore, the average amount raised per person is £80.	1
9	775g	To find the total weight of the fruit salad, we need to add the weights of all the fruits Amir used: Apples: 320g Bananas: 275g Grapes: 180g 320g + 275g + 180g = 775g Therefore, the total weight of the fruit salad Amir made is 775g.	1

| 10 | 600 000 | To find the number of CDs at the warehouse, we need to work backwards from the number of students at the school.

The school has 600 students, and the library has 100 times more books than the school has students.

Number of books in the library = 600 × 100 = 60 000

The number of books in the library is 10 times greater than the number of DVDs at the warehouse.

Number of DVDs at the warehouse = 60 000 ÷ 10 = 6 000

The number of CDs at the warehouse is 100 times greater than the number of DVDs.

Number of CDs = 6 000 × 100 = 600 000

Therefore, there are 600 000 CDs available at the music store. | 1 |