11+ Practice Test Answers

11+ Maths Test 50

Question	Answer	Explanation	Marks
1	43	To find the average number of words Sarah spelled correctly in each practice session, we need to divide the total number of words she spelled correctly by the number of practice sessions. Total words spelled correctly: 215 Number of practice sessions: 5 Average words per session = 215 ÷ 5 = 43 Therefore, Sarah spelled an average of 43 words correctly in each practice session.	1
2	3.4 km	To find the total distance Liam swims in training, we need to add the three distances together. First distance: 1.2 km Second distance: 0.75 km Third distance: 1.45 km 1.2 + 0.75 + 1.45 = 3.4 km Therefore, the total distance Liam swims in training is 3.4 km.	1
3	27 cupcakes	To find the average (mean) number of cupcakes Sarah bakes per day, we need to: 1. Add up the total number of cupcakes baked over the four days. 2. Divide the total by the number of days. Calculation: Monday: 24 cupcakes Tuesday: 18 cupcakes Wednesday: 30 cupcakes Thursday: 36 cupcakes Total cupcakes = 24 + 18 + 30 + 36 = 108 cupcakes Average cupcakes per day = 108 ÷ 4 = 27 cupcakes Therefore, the average number of cupcakes Sarah bakes per day is 27 cupcakes.	1
4	Tent	To find the second heaviest item, we need to convert all the weights to the same unit and then order them from heaviest to lightest. Sleeping bag: 1.2 kg = 1 200 g Tent: 0.8 kg = 800 g Trail mix: 500 g Flashlight: 250 g Ordered from heaviest to lightest: 1. Sleeping bag (1 200 g) 2. Tent (800 g) 3. Trail mix (500 g) 4. Flashlight (250 g) Therefore, the second heaviest item that Amelia packs is the tent.	1

5	14:02	To determine when James should start getting ready, we need to work backwards from the time he needs to arrive at the sports centre (14:20). First, subtract the time it takes to walk to the sports centre: 14:20 - 12 minutes = 14:08. Then, subtract the time James spends filling his water bottle and packing his bag: 14:08 - 6 minutes = 14:02. Therefore, James should start getting ready at 14:02 to arrive at the sports centre on time for his tennis game at 14:20.	**1**
6	Cylinder	A cylinder has exactly two circular faces. A cube has six square faces, a sphere has no flat faces at all, and a cone has only one circular face (the base) and one vertex. Therefore, the cylinder is the only 3D shape among the given options that has exactly two circular faces.	**1**
7	30 miles	To find the distance of a single trip between the warehouses, we need to divide the total distance travelled by the number of trips made. The driver makes 15 trips per week for 12 weeks. So, the total number of trips is: 15 trips/week × 12 weeks = 180 trips The total distance covered is 5 400 miles. Therefore, the distance of a single trip is: 5 400 miles ÷ 180 trips = 30 miles/trip So, the driver travels 30 miles during a single trip between the warehouses.	**1**
8	40 km	To convert miles to kilometres, we use the conversion 3 miles = 5 km. Amir cycled 24 miles, so we need to find out how many sets of 3 miles there are in 24 miles. 24 ÷ 3 = 8 This means there are 8 sets of 3 miles in 24 miles. As each set of 3 miles is equivalent to 5 km, we multiply 8 by 5: 8 × 5 = 40 Therefore, Amir cycled 40 km on his bike ride at the weekend.	**1**
9	16.45 km	To find the total distance Sarah covers, we need to add the distances for swimming, cycling, and running. Swimming distance: 750 m = 0.75 km Cycling distance: 12.5 km Running distance: 3,200 m = 3.2 km Total distance = 0.75 km + 12.5 km + 3.2 km = 16.45 km Therefore, the total distance Sarah covers during her training is 16.45 km.	**1**

10	$12x + 8y$	To solve this problem, we need to consider the promotional deal and calculate the number of cakes that the customer will pay for. For every three cakes of the same flavour, the customer only pays for two. This means that for every three cakes, one is essentially free. For 18 chocolate cakes, the customer will pay for: 18 ÷ 3 × 2 = 12 chocolate cakes. Similarly, for 12 vanilla cakes, the customer will pay for: 12 ÷ 3 × 2 = 8 vanilla cakes. Therefore, the total cost will be: (12 × £x) + (8 × £y), which simplifies to $12x + 8y$. So, the correct answer is $12x + 8y$.	**1**