

# 11+ Practice Test Answers

## 11+ Maths Test 12

Question	Answer	Explanation	Marks
1	124 000	<p>To find the total number of coins Liam will earn, we need to multiply the number of dragons he defeated by the number of coins earned per dragon.</p> <p>Number of dragons defeated: 248 Coins earned per dragon: 500</p> <p>Total coins earned = <math>248 \times 500</math> = 124 000</p> <p>Therefore, Liam will earn a total of 124 000 coins for defeating 248 dragons in the video game.</p>	1
2	10,500	<p>To find the total number of loaves of bread produced in a month, we need to multiply the daily production by the number of working days in a month.</p> <p>Daily production: 420 loaves</p> <p>Working days in a month: 25 days</p> <p>Total loaves per month = <math>420 \times 25</math></p> <p>Total loaves per month = 10,500</p> <p>Therefore, the bakery produces 10,500 loaves of bread in a month.</p>	1
3	11:38	<p>To find the time when the cake will be ready, we need to add the baking time to the start time.</p> <p>Baking time: 1 hour and 15 minutes</p> <p>Start time: 10:23</p> <p>Step 1: Convert 1 hour and 15 minutes to minutes.</p> <p>1 hour = 60 minutes <math>60 \text{ minutes} + 15 \text{ minutes} = 75 \text{ minutes}</math></p> <p>Step 2: Add 75 minutes to the start time (10:23).</p> <p><math>10:23 + 75 \text{ minutes} = 11:38</math></p> <p>Therefore, if Amelia puts the cake in the oven at 10:23, it will be ready at 11:38.</p>	1
4	2.95 km	<p>To find the total distance Liam cycles, we need to add the two distances together.</p> <p>First, we need to convert 650 m to km:</p> <p><math>650 \text{ m} = 0.65 \text{ km}</math> (divide by 1000 to convert from metres to kilometres)</p> <p>Now we can add the distances:</p> <p><math>2.3 \text{ km} + 0.65 \text{ km} = 2.95 \text{ km}</math></p> <p>Therefore, the total distance Liam cycles is 2.95 km.</p>	1

5	Friday	<p>The summer holidays start on Monday 24<sup>th</sup> July and last for 6 weeks and 4 days.</p> <p>6 weeks is equal to 42 days (<math>6 \times 7 = 42</math>).</p> <p>Adding the extra 4 days, we get a total of 46 days (<math>42 + 4 = 46</math>).</p> <p>To find the day of the week for the last day of the summer holidays, we can count forward 46 days from Monday 24<sup>th</sup> July.</p> <p>Counting forward 46 days (or 6 weeks and 4 days) from a Monday will land on a Friday.</p> <p>Therefore, the last day of the summer holidays will be on a Friday.</p>	1
6	2:45 pm	<p>To find out when Ethan arrives at the football pitch, we need to subtract 45 minutes from the start time of the match.</p> <p>The match starts at 3:30 pm.</p> <p>45 minutes before 3:30 pm is calculated as follows:  <math>60 \text{ minutes} - 45 \text{ minutes} = 15 \text{ minutes}</math></p> <p>So, 45 minutes before 3:30 pm is 2:45 pm.</p> <p>Therefore, Ethan arrives at the football pitch at 2:45 pm.</p>	1
7	The garden is in the shape of a rhombus.	<p>In Sarah's garden design, two sides are 8 metres long, and one angle is <math>100^\circ</math>. This information is sufficient to determine that the garden cannot be in the shape of a rhombus.</p> <p>A rhombus is a quadrilateral with four equal sides and opposite angles that are equal. If two sides are 8 metres long and one angle is <math>100^\circ</math>, the garden cannot have four equal sides, which is a necessary condition for a rhombus.</p> <p>However, the given information does not rule out the possibility of the garden being in the shape of a kite, having an angle of <math>80^\circ</math>, or having the other two sides measuring 7 metres long. These statements could still be true based on the provided details.</p> <p>Therefore, the only statement that cannot be true is that Sarah's garden is in the shape of a rhombus.</p>	1
8	0	<p>The total number of squares on the sheet of wrapping paper is <math>12 \times 18 = 216</math>.</p> <p>To find the number of squares each friend gets, we divide the total by the number of friends: <math>216 \div 8 = 27</math>.</p> <p>Since <math>27 \times 8 = 216</math>, we know that all 8 friends will get 27 squares each with none left over.</p>	1
9	£7.65	<p>To find out how much change Liam received, we need to:</p> <p>1. Add up the cost of the items he bought:</p> <p>Crisps: £0.85  Chocolate bar: £0.60  Water: £0.90  Total spent = <math>\text{£}0.85 + \text{£}0.60 + \text{£}0.90 = \text{£}2.35</math></p> <p>2. Subtract the total spent from the amount he paid with (£10):</p> <p>Change = Amount paid - Total spent  Change = <math>\text{£}10 - \text{£}2.35 = \text{£}7.65</math></p> <p>Therefore, Liam received £7.65 in change.</p>	1

10

1 hour 12 minutes

To calculate the total time Liam spends travelling to play football in a week, we need to multiply the average time per trip by the number of trips per week.

Average time per trip: 18 minutes

Number of trips per week: 4

Total time = 18 minutes  $\times$  4

Total time = 72 minutes

To convert 72 minutes to hours and minutes, we divide by 60 (as there are 60 minutes in an hour) and use the remainder as the minutes.

$72 \div 60 = 1$  remainder 12

Therefore, 72 minutes is equal to 1 hour and 12 minutes.

1