## 11+ Practice Test Answers 11+ Maths Test 43

Question	Answer	Explanation	Marks
1	(140 × 3) + 35	To find the correct expression, we need the daily cost (£140) multiplied by the number of days (3), which gives us (140 $\times$ 3). Then, since there's a one-time booking fee of £35, we add this to our total, making the full expression (140 $\times$ 3) + 35. Therefore, (140 $\times$ 3) + 35 is the valid expression because it calculates three days of hire plus one booking fee.	1
2	11:47	The train is scheduled to depart at 11:35 am, but it actually departs 12 minutes later. To find the actual departure time, we need to add 12 minutes to 11:35 am. 11:35 am + 12 minutes = 11:47 am Since the question asks for the time in 24-hour clock format, the correct answer is 11:47.	1
3	£0.10	To find the cost of one chocolate bar, divide the total cost of the box by the number of bars: £5.60 ÷ 8 = £0.70 per chocolate bar To find the cost of one fudge bar, divide the total cost of the box by the number of bars: £3.20 ÷ 4 = £0.80 per fudge bar To find the difference in cost between one chocolate bar and one fudge bar, subtract the cost of a chocolate bar from the cost of a fudge bar: £0.80 - £0.70 = £0.10 Therefore, one fudge bar costs £0.10 more than one chocolate bar.	1
4	36	To determine the number of classes, we need to find the factors of 864 that could result in an equal number of pupils per class. $864 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3$ Factors of 864: 1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 27, 32, 36, 48, 54, 72, 96, 108, 144, 216, 288, 432, 864 Among the given options, 12, 18, and 24 are factors of 864, meaning the pupils could be equally divided into these numbers of classes. However, 36 is not a factor of 864, so it is not possible to have 36 classes with an equal number of pupils in each class. Therefore, 36 is the correct answer.	1
5	8	To find out how many stickers Amelia could put on each page without any left over, we need to find the factors of 96. The factors of 96 are: 1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, 96. From the given answer options, the correct answer is 8. If Amelia puts 8 stickers on each page, there will be 12 pages in total (96 ÷ 8 = 12), and no stickers will be left over.	1

6	86°	In a triangle, the sum of all three angles is always 180°. We know that angle A is 53° and angle B is 41°. To find angle C, we subtract the sum of angles A and B from 180°: Angle C = 180° - (53° + 41°) Angle C = 180° - 94° Angle C = 86° Therefore, the correct answer is 86°.	1
7	£22.41	To calculate the cost of the orange juice Sarah needs, we first need to determine how many 750 ml bottles she will need to buy. Sarah needs 6 750 ml of orange juice in total. To find the number of bottles, we divide 6 750 ml by 750 ml per bottle: 6 750 ml ÷ 750 ml/bottle = 9 bottles Now that we know Sarah needs to buy 9 bottles, we can multiply the cost per bottle (£2.49) by the number of bottles (9) to get the total cost: £2.49/bottle × 9 bottles = £22.41 Therefore, Sarah will need to spend £22.41 on orange juice for her party.	1
8	1 hour, 48 minutes and 0 seconds	<ul> <li>To convert seconds to minutes and seconds:</li> <li>1. Divide the total number of seconds by 60 to get the number of whole minutes: 6,480 ÷ 60 = 108 minutes</li> <li>2. To convert the whole minutes to hours and minutes, divide the number of minutes by 60: 108 ÷ 60 = 1 hour with a remainder of 48 minutes</li> <li>3. There are no remaining seconds as the original number of seconds was divisible by 60 with no remainder.</li> <li>Therefore, 6,480 seconds is equal to 1 hour, 48 minutes and 0 seconds.</li> </ul>	1
9	75	To solve this problem, we first need to find the perimeter of Peter's square lawn by adding all four sides: $4m + 4m + 4m + 4m = 16m$ . Then, we need to convert this to millimetres since the bricks are measured in mm: 16000mm. Finally, we divide the total perimeter by the length of each brick (215mm) to find the number of bricks needed. Therefore, 16 000 ÷ 215 = 74.4 bricks, so Peter will need to buy at least 75 bricks to completely line his lawn.	1
10	2 <i>x</i> + 3	Let's break this down step by step: 1. Amelia has <i>x</i> pens. 2. Oliver has 3 more pens than Amelia. This means Oliver has $x + 3$ pens. 3. To find the total number of pens, we need to add Amelia's pens and Oliver's pens together: Amelia's pens + Oliver's pens = $x + (x + 3)$ 4. Simplifying the right side of the equation: x + (x + 3) = x + x + 3 = 2x + 3 Therefore, the total number of pens that Amelia and Oliver have is $2x + 3$ .	1