Key Stage 2

Mathematics

Answer Booklet:

Paper 1 Arithmetic

Paper 2 Reasoning

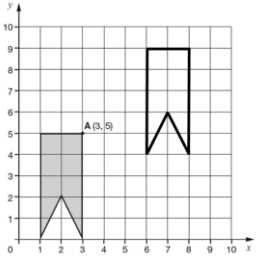# Paper 3 Reasoning

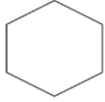Cambridgeshire
County Council

Cambs Maths Team

Paper 1: Arithmetic

Question Number	Content Domain	Answer	Marks & Notes
1	Y3	922	1 mark
2	Y3	$^2/_{11}$	1 mark
3	Y3	70	1 mark
4	Y4	979	1 mark
5	Y4	11	1 mark
6	Y4	240	1 mark
7	Y4	7,332	1 mark
8	Y5	76	1 mark
9	Y4	101.09	1 mark
10	Y3	406	1 mark
11	Y4	60	1 mark
12	Y4	700	1 mark
13	Y5	6	1 mark
14	Y4	5912	1 mark
15	Y6	60,000	1 mark
16	Y4	3.7	1 mark
17	Y5	$^{15}/_{18}$ OR $^5/_6$	1 mark
18	Y6	0.004	1 mark
19	Y5	400	1 mark
20	Y6	320	1 mark
21	Y6	18	1 mark
22	Y6	$^9/_{14}$	1 mark
23	Y6	21,240	2 marks for the correct answer. 1 mark for an incorrect answer but use of a vertical column method with **no more than 1** arithmetic error.
24	Y6	$2\ ^3/_5$	1 mark
25	Y6	15	2 marks for the correct answer. 1 mark for an incorrect answer but use of a vertical column method with **no more than 1** arithmetic error.
26	Y5	0.171	1 mark
27	Y6	188	1 mark
28	Y6	$^4/_{12}$ OR $^1/_3$	1 mark
29	Y6	198,186	2 marks for the correct answer. 1 mark for an incorrect answer but use of a vertical column method with **no more than 1** arithmetic error.
30	Y6	693	1 mark
31	Y6	$^1/_6$	1 mark
32	Y5& Y6	57	1 mark
33	Y5	90	1 mark
34	Y6	93	2 marks for the correct answer. 1 mark for an incorrect answer but use of a vertical column method with **no more than 1** arithmetic error.
35	Y6	238	1 mark
36	Y6	$1\ ^{29}/_{35}$	1 mark

Paper 2: Reasoning

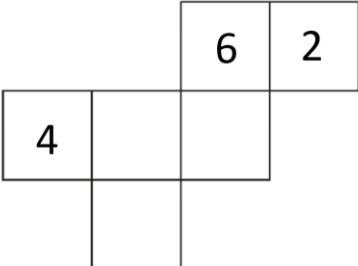| Question Number	Content Domain	Answer	Marks & Notes
1	Y4		1 mark Shape need not be shaded and accept slight inaccuracies in drawing.
2	Y3	Correct addition calculations of: 37 + 48 = 85 OR 48 + 37 = 85	1 mark All 6 digits must be correctly placed in the column addition.
3	Y3	A point on the line in the range 4.6cm to 4.8cm inclusive.	1 mark
4	Y4	Both values correct showing: $^6/_9$ and $^{10}/_{15}$	1 mark Both values must be correct for the award of 1 mark.
5a	Y6 / Y4	9	1 mark **Do not** accept -9 or 9-
5b	Y6 / Y4	Warsaw	1 mark
6	Y5	683,608	1 mark
7	Y4	Both numbers are identified: $^{75}/_{100}$ & 0.75	1 mark Both numbers must be identified for the award of one mark. **No additional numbers** must be identified.
8	Y3	352 If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g. 64 x 4 = 256 32 x 3 = 96 256 + 96 =	2 marks 1 mark
9	Y6	Explanation that recognises that the year 2000 does not fit into the sequence of the games being held every four years e.g 1990, 1994, 1998, 2002.	1 mark

10	Y6	12 x 12 **>** 13 x 10 180 ÷ 9 **<** 160 ÷ 4 30 x 7 **>** 8 x 20 560 ÷ 7 **=** 640 ÷ 8	2 marks for all symbols correct 1 mark for any **three** symbols correct
11	Y6	<table><tr><td>Number of edges</td><td>Number of faces</td><td>Number of vertices</td></tr><tr><td>**12**</td><td>**7**</td><td>**7**</td></tr></table>	2 marks for the table completed as shown. 1 mark for **two** correct numbers correctly placed.
12	Y6 / Y4		1 mark Shape need not be shaded and accept slight inaccuracies in drawing.
13	Y5	Correct fraction circled $^{69}/_7$	1 mark Accept alternative unambiguous indications of the correct answer, e.g. fraction ticked.
14	Y6	All three fractions written in the correct order, as shown $^6/_8$ $^5/_6$ $^7/_6$	1 mark
15	Y5	2,880 If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g. 24 x 3 = 72 72 x 40 =	2 marks 1 mark
16	Y5	Boxes ticked as follows:- Subtract 100 and then subtract 2 ☐ Subtract 7, subtract 90 and then subtract 1 ☑ Add on 2 and then subtract 100 ☑ Subtract 7 from 8, then subtract 90 from 230 and add the two answers ☐	2 marks Award 1 mark for: 1 box ticked correctly and no incorrect boxes ticked Or 2 boxes ticked correctly and one incorrect box ticked.
17	Y5	1.64l or 1640 ml 32 x 230 = 7360 9 litres = 9000ml 9000 – 7360 = 1740 (error) 9000 – 32 x 230	3 marks If the answer is incorrect award 2 marks for evidence of an appropriate method with no more than 1 error, e.g. 1 mark for evidence of appropriate method

| 18 | Y6 | £12.60

Sight of £63 ÷ 5

Or – evidence of an appropriate method
4 tickets cost 4 x £12 = £48
£48 + 15 = £63
£63 ÷ 5 = | 2 marks

1 mark |
| --- | --- | --- | --- |
| 19 | Y6 | 6 – 3 + 3 | 1 mark |
| 20 | Y6 | 22.5cm

If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g.

19 x 7.5 = 142.5cm
22 x 7.5 = 165cm
165 – 142.5 = | 2 marks

1 mark |
21a	Y6	= 23	1 mark
21b	Y6	= 49	1 mark
22	Y6	216cm^3	1 mark
23	Y5	105,192 hours

If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g.

365 ¼ x 12 = answer
Answer x 24 = answer | 2 marks

1 mark |

Paper 3: Reasoning

Question Number	Content Domain	Answer	Marks & Notes
1	Y4 / Y6	___36___ 45 __54__ 63 72 __81_	2 marks

Award 1 mark for **two** numbers correctly placed |
| 2 | Y6 | Green & black **or** Black & green

Blue & black **or** Black & blue | 1 mark |
| 3 | Y5 | 3724 | 1 mark |

4	Y5	7 6 3 3 [7] + 4 5 [4] 8 ――――――――― [8] 0 8 8 5	2 marks for the numbers completed as shown. 1 mark for any **two** numbers completed correctly.
5	Y5	2 4 8 1 mark for two numbers correctly circled and no incorrect numbers circled or Three numbers correctly circled and one incorrect number circled	2 marks for the three numbers circled correctly 1 mark
6	Y6	There are fewer jaguars than cheetahs. [✓] The total number of lions and tigers is 30. [ ] There are 15 cheetahs. [✓] There are 20 lions. [ ]	2 marks for only two correct boxes ticked. 1 mark for one correct box ticked and no incorrect boxes OR 1 mark for two correct boxes ticked and one incorrect box ticked.
7a	Y5	148	1 mark
7b	Y5	2	1 mark
8	Y6	£390	1 mark
9	Y6	45cm	1 mark
10	Y6 / Y5	(-3, 4)	1 mark
11	Y3 / Y4	475ml OR and answer in the range of 470ml and 480ml If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g. 150 + 175 = 325 800 – 325 =	2 marks 1 mark
12	Y5 / Y6	31	1 mark
13	Y5	40 If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g. 2.2 x 1000 = 2200 2200 ÷ 55 = answer	2 marks 1 mark
14	Y6 / Y4	An explanation showing an understanding that the other angle has to be 60° because it is an equilateral triangle or stating that scalene triangles have different sized angles. Do not accept answers that state the triangle could be isosceles.	1 mark
15a	Y6	£4.25	1 mark

15b	Y6	7 colours	2 marks
		If the answer is incorrect award 1 mark for evidence of an appropriate method, e.g. £7 - £1.45 = £5.55 £5.55 ÷ 7	1 mark
16	Y4	166 pages	2 marks
		If the answer is incorrect award 1 mark for sight of 83 OR evidence of an appropriate method, e.g. 249 ÷ 3 = 83 249 − 83 =	1 mark
17	Y5 / Y6		1 mark for all numbers placed in the correct squares. Accept unusual orientations of the numbers.
18	Y6	$^2/_{15}$ or an equivalent fraction.	2 marks
		If the answer is incorrect, award one mark for sight of $^{13}/_{15}$ OR evidence of an appropriate method, e.g. $^2/_3 + ^1/_5$ $^{10}/_{15} + ^3/_{15} = ^{12}/_{15}$ (error) $1 − ^{12}/_{15} =$	1 mark
19	Y6 / Y5	All 3 numbers completed correctly 72.3 x 56 = **4048.8** 7230 x 5.6 = **40,488** 4048.8 ÷ 723 = **5.6**	2 marks
		Award one mark for any two numbers completed correctly.	1 mark
20	Y4 / Y3	122 eggs	2 marks
		If the answer is incorrect, award one mark for sight of 55.	1 mark

			OR Evidence of an appropriate method, e.g. 30 – 19 = 11 11 x 5 = 55 55 + 67	
21a	Y5	60 min 15 sec		1 mark
21b	Y5	46 min 54 sec		1 mark