

Key Stage 2

Mathematics

Answer Booklet:

Paper 1 Arithmetic

Paper 2 Reasoning

Paper 3 Reasoning

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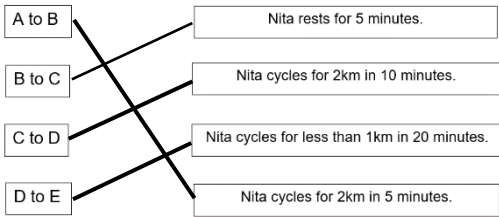
Paper 1: Arithmetic

Question Number	Content Domain	Answer	Marks & Notes
1	Y4	8,405	1 mark
2	Y4	0	1 mark
3	Y3	396	1 mark
4	Y4	2,100	1 mark
5	Y3	315	1 mark
6	Y4/5	15.44	1 mark
7	Y4	40	1 mark
8	Y4	132	1 mark
9	Y4	7,477	1 mark
10	Y5	20,200	1 mark
11	Y4	60	1 mark
12	Y4	770	1 mark
13	Y4	120	1 mark
14	Y5	795,000	1 mark
15	Y4	3,983	1 mark
16	Y6	0.424	1 mark
17	Y6	38	Award TWO marks for the correct answer of 38. If the answer is incorrect, award ONE mark for a formal method of division with no more than ONE arithmetic error.
18	Y6	$1\frac{1}{9}$ or $\frac{10}{9}$	1 mark
19	Y6	45,760	Award TWO marks for the correct answer of 45,760. If the answer is incorrect, award ONE mark for a formal method of long multiplication with no more than ONE arithmetic error.
20	Y6	24,030	1 mark
21	Y6	4	1 mark
22	Y5	48	1 mark
23	Y5	1.679	1 mark
24	Y6	$\frac{1}{12}$	1 mark
25	Y6	$\frac{7}{12}$	1 mark
26	Y5	23.976	1 mark
27	Y6	810	1 mark
28	Y6	200	1 mark
29	Y6	42	Award TWO marks for the correct answer of 38. If the answer is incorrect, award ONE mark for a formal method of division with no more than ONE arithmetic error.
30	Y6	180	1 mark
31	Y6	$\frac{9}{35}$	1 mark

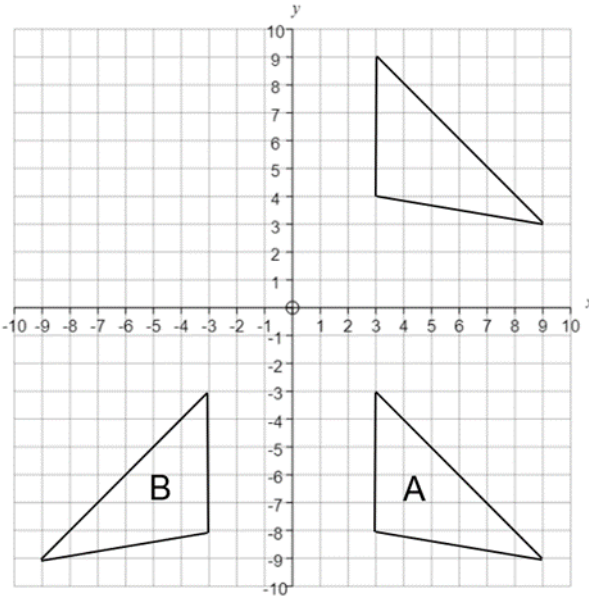
32	Y6	$1\frac{7}{12}$ or $\frac{19}{12}$	1 mark
33	Y6	463,448	Award TWO marks for the correct answer of 45,760. If the answer is incorrect, award ONE mark for a formal method of long multiplication with no more than ONE arithmetic error.
34	Y6	$15\frac{3}{4}$ or $\frac{63}{4}$	1 mark
35	Y6	9	1 mark
36	Y5	250	1 mark

Paper 2: Reasoning

Question Number	Content Domain	Answer	Marks & Notes
1	Y6	8,416,300	1 mark
2	Y3	7	1 mark
3	Y5	30,000	1 mark
4a	Y4	John	1 mark Accept 1, 530ml
4b	Y4	Emma	1 mark Accept 1,380 ml
5	Y5	4,600	1 mark
6	Y4/5	1.75	1 mark
7	Y4	$\frac{3}{10}$	1 mark
8	Y5	$\frac{16}{6}$	1 mark
9	Y3	78	1 mark
10	Y4	£4.25	2 marks If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g., $1.70 + 1.70 = 3.40$ $1.70 \div 2 = 85p$ $1.70 + 0.85 = 3.25$ (error)

			Answer need not be obtained for the award of ONE mark. Accept for ONE mark an answer of (£)425 OR £425p as evidence of an appropriate method.
11	Y6	$\frac{12}{20}$ and $\frac{2}{3}$	1 mark for both answers correct
12	Y3/5	600g, 1.6kg, 2kg, 2500g 1 mark for the order shown.	1 mark Accept correct conversions.
13	Y6		1 mark for all correctly matched.
14	Y6	50	1 mark
15	Y3/4	<input type="checkbox"/> > <input type="checkbox"/> > <input type="checkbox"/> > <input type="checkbox"/> <	2 marks If the answer is incorrect, award ONE mark for three signs placed correctly.
16	Y5	29.82 29.75	1 mark for ticking both numbers correctly.
17	Y5	7 OR 14 OR 28	1 mark Also, award ONE mark for more than one correct answer given and no incorrect answers
18	Y5	814	Award 2 marks for the correct answer. If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g.

			$900 \times 2 = 1800$ $609 + 523 = 1132$ $1800 - 1132$
19	Y5/6	20	1 mark
20	Y5/6	28	2 marks If the answer is incorrect, award ONE mark for evidence of an appropriate complete method with no more than one arithmetic error, e.g., $12 \times 16 = 200$ (error) $14 \times 10 = 140$ $200 + 140 = 340$ $360 - 340 = 20$
21a	Y6	21 (Triangle)	1 mark
21b	Y6	16 (Circle)	1 mark
22	Y6	3600	2 marks If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g. $600 = 4 \times 150$ $4 \times 750 = 3000$ $3000 + 600 = 3500$ (error)
23	Y6	30	2 marks If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g. $1100\text{g} - 980\text{g} = 110\text{g}$ (error) $1250 - 1100 = 150\text{g}$ $150 - 110 = 40\text{g}$ OR Award ONE mark for the correct weight of the banana and the orange, e.g., 120g AND 150g
24	Y5/6	$x = 70^\circ$ $y = 20^\circ$	2 marks for both answers correct. If the answer is incorrect, award ONE mark for evidence of an appropriate method calculating both angles, e.g., $180 - 40 = 140$

			$140 \div 2 = 60$ (error) $90 - 60 = 30$
25	Y6		<p>2 marks for both A and B drawn correctly.</p> <p>Award ONE mark for either: correct triangle A OR correct triangle B.</p> <p>Accept slight inaccuracies in drawing providing the intention is clear..</p>

Paper 3: Reasoning

Question Number	Content Domain	Answer	Marks & Notes
1	Y5	10	1 mark
2	Y3/4	$56 = 7 \times 8$ $36 = 4 \times 9$ $30 = 6 \times 5$	1 mark Accept for each multiplication the numbers given in either order, ie.: 8×7 5×6 9×4
3	Y3	35(p)	2 marks for the correct answer If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g. $120p + 45p + 165p$ $50p \times 4 - 165p$

4	Y4		<p>2 marks for all four fractions matched to the correct decimal as shown.</p> <p>Award ONE mark for three fractions and decimals matched correctly.</p> <p>Do not accept any fraction that has been matched to more than one decimal number</p>
5	Y3	130 (children)	<p>2 marks for the correct answer.</p> <p>If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g. $87 + 147 + 38 = 272$ $402 - 272$</p>
6a	Y4/5	-7	<p>1 mark</p> <p>Do not accept 7-</p>
6b	Y4/5	11	<p>1 mark</p> <p>Do not accept -11</p>
7	Y5	89,444	<p>2 marks for the correct answer</p> <p>Award ONE mark for evidence of an appropriate method, e.g.: $82,879 + 68,309 = 151,188$ $240,632 - 151,188$</p>
8	Y4	<p>To the nearest 1000 = 6000</p> <p>To the nearest 100 = 6500</p> <p>To the nearest 10 = 6470</p>	<p>2 marks for all three correct.</p> <p>If the answer is incorrect, award ONE mark for any two of the numbers rounded correctly.</p>
9	Y5	23,700	1 mark
10	Y5/6	£1.50	<p>2 marks for the correct answer.</p> <p>If the answer is incorrect, award ONE mark for an appropriate method, e.g.: $£1.94 + £1.94 = £3.88$ $£5.38 - £3.88$</p>
11	Y5	26 or 27 or 28 or 29 or 30 or 31 or 32 or 33	<p>1 mark</p> <p>Award ONE mark for more than one correct answer given and there are no incorrect answers. Do not accept decimal numbers.</p>
12a	Y5	72	1 mark
12b	Y5	260 or -40	1 mark

13	Y5	$\frac{1}{8}$	1 mark
14	Y5/6	£88	1 mark
15a	Y5	270	1 mark
15b	Y3	B	1 mark
16	Y5	$\frac{3}{5}$ and $\frac{6}{10}$ and $\frac{60}{100}$	2 marks for all three correctly ticked. If the answer is incorrect, award ONE mark for: - only two boxes ticked correctly and no incorrect boxes ticked. OR - three boxes ticked correctly and one incorrect box ticked.
17	Y5	124	2 marks for the correct answer. If the answer is incorrect, award ONE mark for an appropriate method, e.g.: $8.5 \times 4 = 34$ $13 \times 4 = 52$ $9.5 \times 4 = 38$ $34 + 52 + 38$ OR: $8.5 + 13 + 9.5 = 31 \times 4$
18	Y6	£8.40	2 marks for the correct answer. If the answer is incorrect, award ONE mark for evidence of an appropriate method, e.g.: $14 \div 10 = 1.40$ $1.40 \times 4 = 5.60$ $14.00 - 5.60$
19	Y5	Award 1 mark for a correct explanation, e.g.: Jack is correct. All prime numbers squared have 3 factors. A squared prime number will be divisible by one, itself and the prime number, e.g.: $2^2 = 4$. Factors of 4 = 1, 2 and 4. $3^2 = 9$. Factors of 9 = 1, 3 and 9. $5^2 = 25$. Factors of 25 = 1, 5 and 25.	1 mark
20	Y5/6	315, 400	3 marks for the correct answer. If the answer is incorrect, award TWO marks for: evidence of an appropriate complete method which contains no more than one error, e.g.:

			350, 245 + 298, 302 + 347, 793 + 265, 097 = 1,261,139 (error) $1,261,139 \div 4 = 315, 284 \text{ r}3$ Rounded to the nearest 100 = 315,300.
21	Y5/6	(12,6)	1 mark