

Cambridge Primary Checkpoint

MATHEMATICS

0096/01

Paper 1

October 2023

MARK SCHEME

Maximum Mark: 40

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Markers were instructed to award marks. It does not indicate the details of the discussions that took place at a Markers' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the End of Series Report. Cambridge will not enter into discussions about these mark schemes.

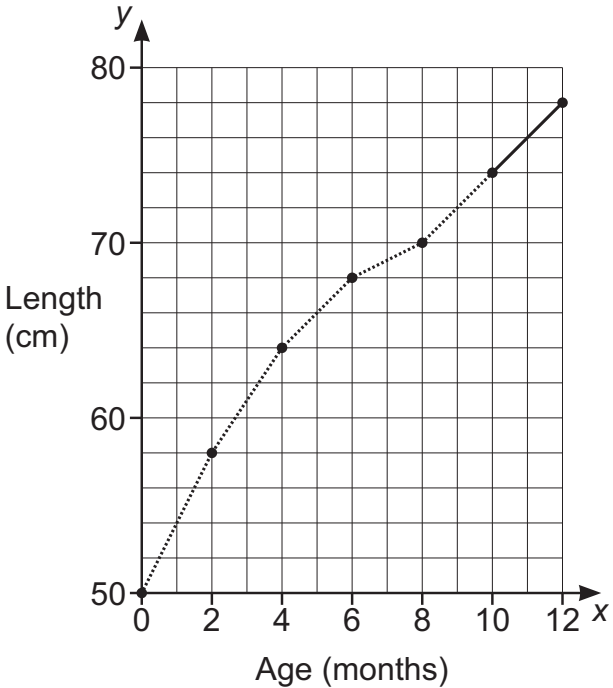
This document has **10** pages.

Mark scheme annotations and abbreviations

FT	follow through after error
SC	special case mark
cao	correct answer only
dep	dependent
isw	ignore subsequent working
nfww	not from wrong working
oe	or equivalent
soi	seen or implied

Question	Answer	Marks	Part Marks	Guidance
1	3	1		Do not accept 3.0 or 3.00
2	20	1		
3	$\frac{3}{5}$ cao	1		
4	C and E	1		Both answers correct in either order for the mark. Do not accept incorrect letters. Accept (4, 3) and (5, 3).
5	-21 -11	1		Both answers in the correct order for the mark. Do not accept 21– or 11–
6	An angle of 135° drawn.	1		Accept 133 – 137° inclusive.
7	3, 7, 13 or 5, 7, 11	1		All three numbers correct in any order for the mark.
8	(-1, 5)	1		Do not accept (1–, 5).
9	$7 + 50 \times 6$ and $100 \times 3 + 7$	1		Both answers correct for the mark. Accept any clear indication.
10	17.2×4	1		Accept any clear indication.

Question	Answer	Marks	Part Marks	Guidance															
11	54 (cm ²)	1																	
12	100° and 45° and 35°	1		All three answers correct for the mark. Accept any clear indication.															
13(a)	36 (cm)	1																	
13(b)	$d = s + s + s + s$	1		Accept any clear indication.															
14	354 (≠) 6	1		All four digits in the correct order for the mark.															
15(a)	C A B	1		All three letters in the correct order for the mark.															
15(b)	<table border="1"> <thead> <tr> <th>Event 1</th> <th>Event 2</th> <th>Mutually exclusive</th> </tr> </thead> <tbody> <tr> <td>Pierre picks a white shape</td> <td>Pierre picks a grey shape</td> <td>✓</td> </tr> <tr> <td>Pierre picks a triangle</td> <td>Pierre picks a grey shape</td> <td></td> </tr> <tr> <td>Pierre picks a circle</td> <td>Pierre picks a triangle</td> <td>✓</td> </tr> <tr> <td>Pierre picks a square</td> <td>Pierre picks a white shape</td> <td></td> </tr> </tbody> </table>	Event 1	Event 2	Mutually exclusive	Pierre picks a white shape	Pierre picks a grey shape	✓	Pierre picks a triangle	Pierre picks a grey shape		Pierre picks a circle	Pierre picks a triangle	✓	Pierre picks a square	Pierre picks a white shape		1		Both ticks correct and none incorrect for the mark. Accept any clear indication.
Event 1	Event 2	Mutually exclusive																	
Pierre picks a white shape	Pierre picks a grey shape	✓																	
Pierre picks a triangle	Pierre picks a grey shape																		
Pierre picks a circle	Pierre picks a triangle	✓																	
Pierre picks a square	Pierre picks a white shape																		

Question	Answer	Marks	Part Marks	Guidance
16(a)	<p style="text-align: center;">Baby Gabriella</p> 	1		<p>Do not accept a correct point without a correct line completing the graph.</p> <p>Correct point implied by line drawn to (12, 78).</p> <p>Tolerance of ± 2 mm to correct point in any direction.</p>
16(b)	0–2 months	1		Accept any clear indication.

Question	Answer	Marks	Part Marks	Guidance
17	<p>No ticked and An explanation showing that 50 squares should be shaded but fewer have been shaded, e.g. He has not shaded enough and there should be 50 and he has only done 40 or 40 shaded and 60 white. or 40 out of 100 squares are shaded. or 10 more shaded squares are needed.</p>	1		<p>Accept answers showing he has not shaded enough squares, e.g. Less than 50% of the squares are shaded.</p> <p>50 squares may be expressed as, e.g. 50%, $\frac{1}{2}$, half, $\frac{50}{100}$, 0.5 oe</p> <p>Stating that $\frac{1}{2}$ (or 50%) is not shaded without quantifying greater or less is not sufficient.</p> <p>Accept equivalent answers which refer to the component parts.</p> <p>All numbers used must be correct.</p>
18	1[.00], 0.98	1		Accept any equivalent answer.

Question	Answer	Marks	Part Marks	Guidance								
19	6	2	Award 1 mark for sight of any two from <ul style="list-style-type: none"> • $56 \div 8$ • $1500 \div 250$ or $1.5 \div 0.25$ • $20 \div 2$ or <ul style="list-style-type: none"> • $8 \times 7 = 56$ • $250 \times 6 = 1500$ • $10 \times 2 = 20$ 	1 mark implied by sight of any two from <ul style="list-style-type: none"> • 7 • 6 • 10 nfw								
20	$5 \times (7 - 2)$	1										
21	1200 (ml) 600 (ml)	2	Award 1 mark for each correct answer.	Accept with other units if correct, e.g. 1 litre 200 ml								
22	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Colour of bead</th> <th style="width: 50%;">Number of beads</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td style="text-align: center;">3</td> </tr> <tr> <td>White</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Black</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Colour of bead	Number of beads	Red	3	White	1	Black	4	1		All three answers correct for the mark.
Colour of bead	Number of beads											
Red	3											
White	1											
Black	4											
23	$\frac{3}{20}$ or 0.15 oe	1										
24	9 (cm)	1										

Question	Answer	Marks	Part Marks	Guidance
25(a)	(2, 1)	1		Accept answer written on the grid.
25(b)	(–3, 6)	1		Accept answer written on the grid. Do not accept (3–, 6).
26	354, 534, 456, 546, 564, 654	2	Award 1 mark for two or more correct and no more than two incorrect.	Accept answers in any order. For 1 mark, accept numbers that use duplicate cards to make some of the correct numbers, i.e. 336, 366, 444, 636, 666 Award 2 marks if they list all 11 possibilities using duplicates.

Question	Answer	Marks	Part Marks	Guidance
27	20 (cm ²)	2	<p>Award 1 mark for sight of 36 or 16 nfw</p> <p>or evidence that all four of the right-angled triangles have an area of 4 (cm²)</p> <p>or a correct method with arithmetic errors, e.g.</p> $(4 + 2) \times (4 + 2) - 4 \left(\frac{1}{2} \times 4 \times 2 \right)$ <p>or</p> $4 \left(\frac{1}{2} \times 4 \times 2 \right) + (2 \times 2) \text{ oe}$	
28	63.127	1		
29(a)	F	1		
29(b)	C and D	1		Both answers correct in either order for the mark.

Question	Answer	Marks	Part Marks	Guidance																
30	<table border="1"> <tr> <td data-bbox="436 264 589 406">○</td> <td data-bbox="593 264 745 406">○</td> <td data-bbox="750 264 902 406">○</td> <td data-bbox="907 264 1046 406">12</td> </tr> <tr> <td data-bbox="436 410 589 552">○</td> <td data-bbox="593 410 745 552">△</td> <td data-bbox="750 410 902 552">○</td> <td data-bbox="907 410 1046 552">13</td> </tr> <tr> <td data-bbox="436 555 589 697">△</td> <td data-bbox="593 555 745 697">△</td> <td data-bbox="750 555 902 697">△</td> <td data-bbox="907 555 1046 697">15</td> </tr> <tr> <td data-bbox="436 700 589 818">13</td> <td data-bbox="593 700 745 818">14</td> <td data-bbox="750 700 902 818">13</td> <td data-bbox="907 700 1046 818"></td> </tr> </table>	○	○	○	12	○	△	○	13	△	△	△	15	13	14	13		1		
○	○	○	12																	
○	△	○	13																	
△	△	△	15																	
13	14	13																		
31	Any number between 1.00 and 9.99 inclusive with 2 dp, e.g. 3.67	1																		