



Cambridge Assessment
International Education

Cambridge Primary Sample Test
For use with curriculum published in
September 2020

Mathematics Paper 1
Mark Scheme
Stage 5

General guidance on marking**Difference in printing**

It is suggested that schools check their printed copies for differences in printing that may affect the answers to the questions, for example in measurement questions.

Brackets in mark scheme

When brackets appear in the mark scheme this indicates extra information that is not required for the award of the mark(s).

For example:

A question requiring an answer in grams may have an answer line: grams

The mark scheme will show the word 'grams' in brackets.

These tables give general guidelines on marking learner responses that are not specifically mentioned in the mark scheme. Any guidance specifically given in the mark scheme supersedes this guidance.

Number and place value

The table shows various general rules in terms of acceptable decimal answers.

Accept
Accept omission of leading zero if answer is clearly shown, e.g. .675
Accept trailing zeros, unless the question has asked for a specific number of decimal places, e.g. 0.7000
Accept a comma as a decimal point if that is the convention that you have taught the learners, e.g. 0,638

Units

For questions involving quantities, e.g. length, mass, money, duration or time, correct units must be given in the answer. Units are provided on the answer line unless finding the units is part of what is being assessed.

The table shows acceptable and unacceptable versions of the answer 1.85m.

	Accept	Do not accept
If the unit is given on the answer line, e.g. m	Correct conversions, provided the unit is stated unambiguously, e.g.185 cm..... m (this is unambiguous since the unit cm comes straight after the answer, voiding the m which is now not next to the answer)185..... m1850..... m etc.
If the question states the unit that the answer should be given in, e.g. 'Give your answer in metres'	1.85 1 m 85 cm	185; 1850 Any conversions to other units, e.g. 185 cm

Money

In addition to the rules for units, the table below gives guidance for answers involving money. The table shows acceptable and unacceptable versions of the answer \$0.30.

	Accept	Do not accept
If the amount is in dollars and cents, the answer should be given to two decimal places.	\$0.30 For an integer number of dollars it is acceptable not to give any decimal places, e.g. \$9 or \$9.00	\$0.3
If units are not given on the answer line	Any unambiguous indication of the correct amount, e.g. 30 cents; 30c \$0.30; \$0-30; \$00:30	30 or 0.30 without a unit \$30; 0.30 cents Ambiguous answers, e.g. \$30 cents; \$0.30c; \$0.30 cents (as you do not know which unit applies because there are units either side of the number)
If \$ is shown on the answer line	All unambiguous indications, e.g. \$.....0.30.....; \$.....0-30.....; \$.....00:30.....	\$.....30..... Ambiguous answers, e.g. \$.....30 cents.....; \$.....0.30 cents..... unless units on the answer line have been deleted, e.g. \$.....30 cents.....
If cents is shown on the answer line30.....cents0.30.....cents Ambiguous answers, e.g.\$30cents;\$0.30cents unless units on the answer line have been deleted, e.g.\$0.30.....cents

Duration

In addition to the rules for units, the table below gives guidance for answers involving time durations. The table shows acceptable and unacceptable versions of the answer 2 hours and 30 minutes.

Accept	Do not accept
<p>Any unambiguous indication using any reasonable abbreviations of hours (h, hr, hrs), minutes (m, min, mins) and seconds (s, sec, secs), e.g. 2 hours 30 minutes; 2 h 30 m; 02 h 30 m</p> <p>Any correct conversion with appropriate units, e.g. 2.5 hours; 150 mins</p> <p>unless the question specifically asks for time given in hours and minutes</p>	<p>Incorrect or ambiguous formats, e.g. 2.30; 2.3; 2.30 hours; 2.30 min; 2 h 3; 2.3 h (this is because this indicates 0.3, i.e. 18 minutes, of an hour rather than 30 minutes)</p> <p>02:30 (as this is a 24-hour clock time, not a time interval)</p> <p>2.5; 150</p>

Time

The table below gives guidance for answers involving time.

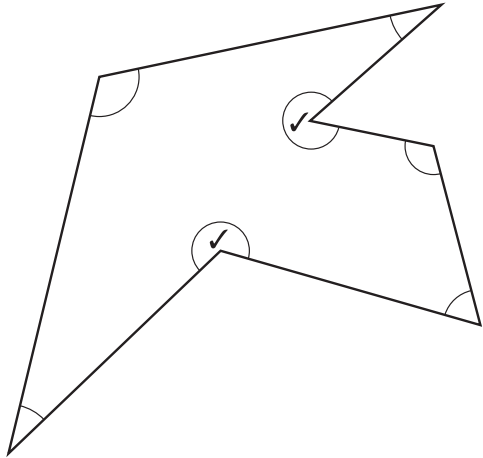
The table shows acceptable and unacceptable versions of the answer 07:30.

	Accept	Do not accept
If the answer is required in 24-hour format	Any unambiguous indication of correct answer in numbers, words or a combination of the two, e.g. 07:30 with any or no separator in place of the colon, e.g. 07 30; 07,30; 07-30; 0730	7:30 7:30 am 7 h 30 m 7:3 730 7.30 pm 073 07.3
If the answer is required in 12-hour format	Any unambiguous indication of correct answer in numbers, words or a combination of the two, e.g. 7:30 am with any separator in place of the colon, e.g. 7 30 am; 7.30 am; 7-30 am 7.30 in the morning Half past seven (o'clock) in the morning Accept am or a.m.	Absence of am or pm 1930 am 7 h 30 m 7:3 730 7.30 pm

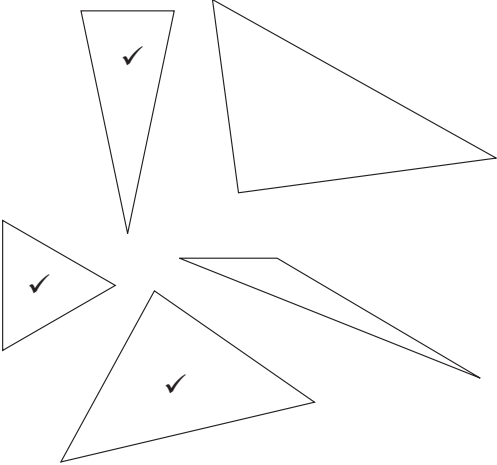
Negative numbers

The table shows acceptable and unacceptable versions of the answer -2 .

Accept	Do not accept
-2	$2-$

Question	Answer	Mark	Part Marks	Guidance																																				
1	$500 \times \boxed{3} = 1500$ $500 = \boxed{50} \times 10$	1		Both correct for the mark.																																				
2	07:02:20	1																																						
3	<table border="1" style="border-collapse: collapse; text-align: center;"> <tbody> <tr> <td>0.01</td><td>0.02</td><td>0.03</td><td>0.04</td><td>0.05</td><td>0.06</td><td>0.07</td><td>0.08</td><td>0.09</td></tr> <tr> <td>0.1</td><td>0.2</td><td>0.3</td><td>0.4</td><td>0.5</td><td>0.6</td><td>0.7</td><td>0.8</td><td>0.9</td></tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr> <td>10</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td><td>70</td><td>80</td><td>90</td></tr> </tbody> </table>	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	1		Accept any clear indication.
0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09																																
0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9																																
1	2	3	4	5	6	7	8	9																																
10	20	30	40	50	60	70	80	90																																
4	$\boxed{53}$ 41 29 17 5 $\boxed{-7}$	1		Both correct for the mark.																																				
5		1		Both correct for the mark. No other angles marked. Accept any clear indication of the correct reflex angles.																																				

Question	Answer	Mark	Part Marks	Guidance
6	<div style="border: 1px solid black; padding: 5px;"> <p>There are 8 floors in a hotel.</p> <p>Each floor has 132 rooms.</p> <p>There are 396 rooms in use.</p> <p>There are 660 rooms not in use.</p> </div> <p>or</p> <div style="border: 1px solid black; padding: 5px;"> <p>There are 8 floors in a hotel.</p> <p>Each floor has 132 rooms.</p> <p>There are 660 rooms in use.</p> <p>There are 396 rooms not in use.</p> </div>	1		<p>Accept</p> <div style="border: 1px solid black; padding: 5px;"> <p>There are 132 floors in a hotel.</p> <p>Each floor has 8 rooms</p> <p>There are 396 rooms in use.</p> <p>There are 660 rooms not in use.</p> </div> <p>or</p> <div style="border: 1px solid black; padding: 5px;"> <p>There are 132 floors in a hotel.</p> <p>Each floor has 8 rooms</p> <p>There are 660 rooms in use.</p> <p>There are 396 rooms not in use.</p> </div>

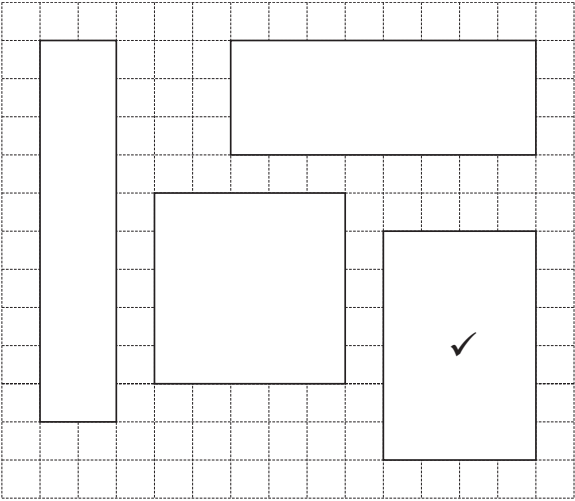
Question	Answer	Mark	Part Marks	Guidance												
7	5589	2	<p>Sight of correct method with one error, e.g. $200 \times 27 = 5400$ $7 \times 27 = \text{wrong answer}$</p> <p>5400 + wrong answer = correctly calculated or</p> <table border="1"> <tr> <td></td> <td>200</td> <td>0</td> <td>7</td> </tr> <tr> <td>20</td> <td>4000</td> <td>error</td> <td>140</td> </tr> <tr> <td>7</td> <td>1400</td> <td>error</td> <td>49</td> </tr> </table> <p>4000 + 1400 + error + 140 + 49 correctly calculated</p>		200	0	7	20	4000	error	140	7	1400	error	49	<p>Do not accept place value errors, e.g. $200 \times 20 = 400$ for 1 mark.</p>
	200	0	7													
20	4000	error	140													
7	1400	error	49													
8		1		<p>Accept any clear indication.</p>												
9	(10, 10) (6, 2) (10, 4) (6, 4) (10, 2)	1		<p>Accept any clear indication.</p>												

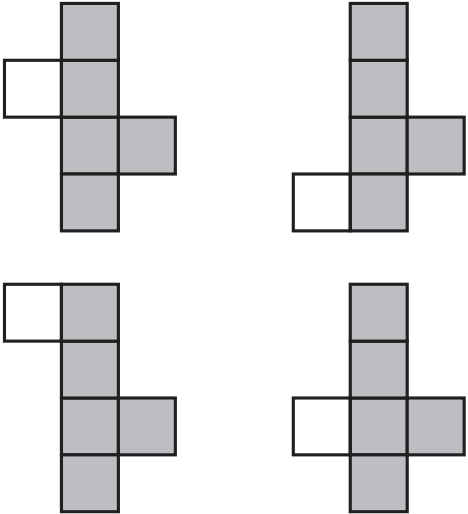
Question	Answer	Mark	Part Marks	Guidance
10	28 and -28 -128 and 28	1		Accept numbers in either order. Both needed for the mark.
11	$\left(\frac{6}{4}\right)$ $\frac{4}{6}$ $\frac{10}{15}$ $\left(\frac{15}{10}\right)$ $\left(1\frac{4}{8}\right)$ $1\frac{3}{8}$	1		All correct for 1 mark with no extras.
12	Both shapes are polygons. <input checked="" type="checkbox"/> Both shapes have right angles. <input type="checkbox"/> Both shapes have parallel sides. <input type="checkbox"/> Both shapes are regular. <input checked="" type="checkbox"/>	1		Accept any clear indication. Accept * instead of blank. Both correct for the mark.
13	12 (pear trees)	1		
14	85 (centimetres)	1		
15	5	1		Accept 'five'.

Question	Answer	Mark	Part Marks	Guidance
16		1		<p>Accept slight inaccuracies provided the intention is clear.</p>
17	4	1		<p>Accept clear indication, e.g. on diagram.</p>
18	Yoyo Train Ball Car	1		

Question	Answer	Mark	Part Marks	Guidance
19		2	Award 1 mark for two correct lines drawn.	
20		1		All lines correct for the mark.

Question	Answer	Mark	Part Marks	Guidance																		
21	12 and 4	1		Accept numbers given in either order. Accept numbers written as words.																		
22	450×2 $\left(450 \times \frac{1}{2}\right)$ $450 \div \frac{1}{2}$ $450 \div 10$ $\left(450 \div 2\right)$	1		Both needed for the mark. Accept any clear indication.																		
23(a)	60 (metres)	1																				
23(b)	100	1																				
24	<table border="1"> <tr> <td>4.3</td> <td>4.5</td> <td>4.7</td> <td>4.9</td> <td>5.1</td> <td>5.3</td> <td>5.5</td> </tr> <tr> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> </tr> </table>	4.3	4.5	4.7	4.9	5.1	5.3	5.5		✓	✓	✓	✓	✓		1		All correct for the mark. Accept any clear indication.				
4.3	4.5	4.7	4.9	5.1	5.3	5.5																
	✓	✓	✓	✓	✓																	
25(a)	<table border="1"> <thead> <tr> <th>Name</th> <th>Number of tiles</th> <th>Can join all of their square tiles to make a large square</th> </tr> </thead> <tbody> <tr> <td>Eva</td> <td>9</td> <td>(✓)</td> </tr> <tr> <td>Gabriella</td> <td>4</td> <td>✓</td> </tr> <tr> <td>Safia</td> <td>15</td> <td></td> </tr> <tr> <td>Angelique</td> <td>33</td> <td></td> </tr> <tr> <td>Anastasia</td> <td>64</td> <td>✓</td> </tr> </tbody> </table>	Name	Number of tiles	Can join all of their square tiles to make a large square	Eva	9	(✓)	Gabriella	4	✓	Safia	15		Angelique	33		Anastasia	64	✓	1		Accept any clear indication. Both correct for the mark.
Name	Number of tiles	Can join all of their square tiles to make a large square																				
Eva	9	(✓)																				
Gabriella	4	✓																				
Safia	15																					
Angelique	33																					
Anastasia	64	✓																				

Question	Answer	Mark	Part Marks	Guidance
25(b)	Any square number except 4, 9 and 64	1		e.g. 16, 25, 36, 49, 81, 100
26	(\$)64.75	2	Award 1 mark for complete correct method with any number of arithmetic errors. e.g. $42.50 \times 10 = 425$ $425 + 7.75 = 432.75$ $497.50 - 432.75 =$	
27		1		Accept any clear indication.
28	C and An explanation that refers to the fact that this is the only chart where accurate information can be easily read using the scale.	1		e.g. Rajiv can't read class 4 on any of the other charts. It is more difficult to read the numbers from the other charts.

Question	Answer	Mark	Part Marks	Guidance
29	Two from 	1		Two correct for the mark.
30	10.81	1		
31	(4, 1)	1		Accept the point (4, 1) plotted on the grid.
32	(x =) 110	1		Accept 110°
33	-1.1 -0.9 -0.91 -1.01 -1.11	1		Accept any clear indication.

Question	Answer	Mark	Part Marks	Guidance
34	<p>They pick up the same number of drink cans as paper coffee cups. <input checked="" type="checkbox"/></p> <p>All the plastic bottles they pick up are the same size. <input type="checkbox"/></p> <p>58% of the rubbish is plastic bottles. <input checked="" type="checkbox"/></p> <p>They pick up 17 paper coffee cups. <input type="checkbox"/></p>	1		<p>Accept any clear indication.</p> <p>Both correct for the mark.</p>
35	<p>Explanation that includes at least two possible solutions, e.g. they can be a 3 and a 1 or a 2 and a 2 or $363 + 168 = 531$ and $263 + 268 = 531$ or $163 + 368 = 531$ and $263 + 268 = 531$</p>	1		<p>Accept answers that include reference to the fact that 1 (hundred) must be added to two other numbers (of hundreds) to make a total of 5 (hundreds) and there is more than one way to do this. e.g. 1 hundred will be carried over from the tens, so the numbers could be 1 and 3 or 2 and 2</p>