Cambridge Assessment International Education

Cambridge Primary Checkpoint

MATHEMATICS **0845/01**

Paper 1 **April 2020**

MARK SCHEME

Maximum Mark: 40

Published

This mark scheme is published as an aid to teachers and learners, to indicate the requirements of the examination. However, we have not been able to adjust it to reflect the full range of answers that would have been seen as a part of the normal moderation and marking process, and it does not necessarily contain all the possible alternatives that might have arisen. Cambridge will not enter into discussions about the mark scheme.

General guidance on marking

This section gives 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.**

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.

Mark scheme annotations and abbreviations

M1	method mark
A1	accuracy mark
B1	independent mark
FT	follow through after error
dep	dependent
oe	or equivalent
cao	correct answer only
isw	ignore subsequent working
soi	seen or implied

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.

Negative numbers

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

Accept	Do not accept
–2	2–

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 tailing 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 1.85 m.

	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..... m .....1850.....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 $09 or $09.00
If units are not given on the answer line	Any unambiguous indication of the correct amount, e.g. 30 cents; 30 c $0.30; $0-30; $0=30; $00:30	30 or 0.30 without a unit $30; 0.30 cents Ambiguous answers, e.g. $30 cents; $0.30 c; $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.....; $.....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 line	.....30.....cents	.....0.30.....cents Ambiguous answers, e.g. .....$30 .....cents; .....$0.30 .....cents **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.

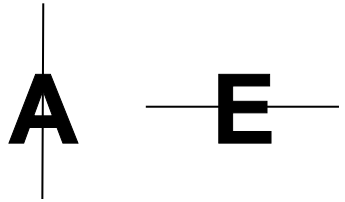
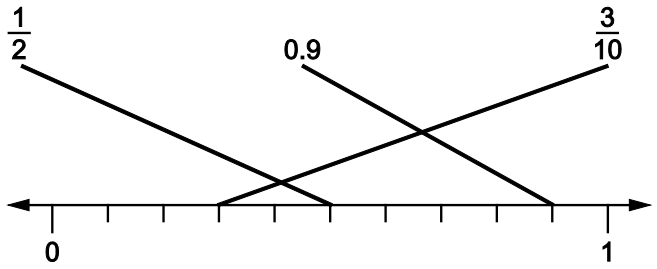
Accept	Do not accept
Any unambiguous indication using any reasonable abbreviations of hours (h, hr, hrs), minutes (m, min, mins) and seconds (s, sec, secs), e.g. 2 hours 30 minutes; 2 h 30 m; 02 h 30 m Any correct conversion with appropriate units, e.g. 2.5 hours; 150 mins **unless** the question specifically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

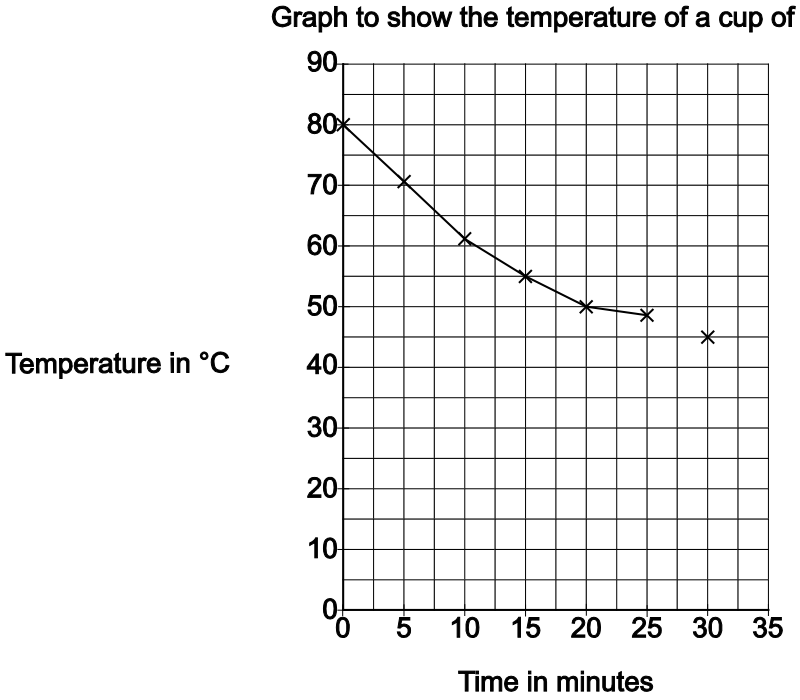
Time

The table below gives guidance for answers involving time. It shows acceptable and unacceptable versions of the answer 07:30.

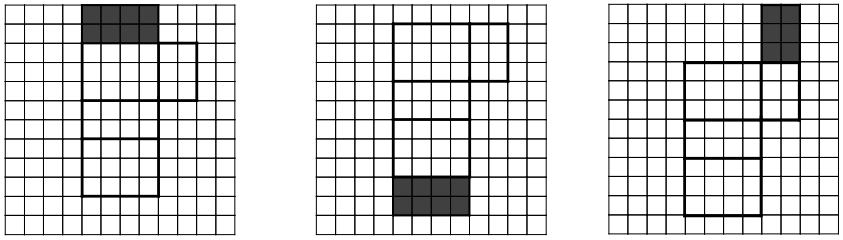
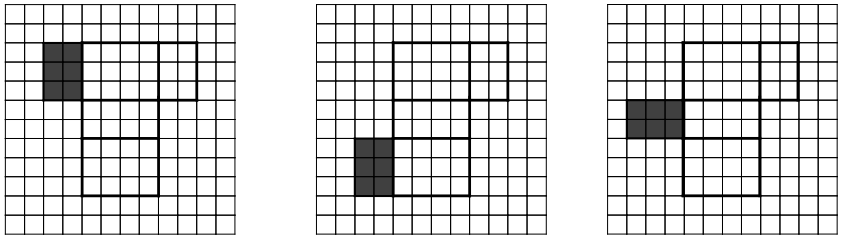
	Accept	Do not accept
If the answer is required in 24-hour format	Any unambiguous indication of correct answer in numbers, words or a combination of the two, e.g. 07:30 with any separator in place of the colon, e.g. 07 30; 07,30; 07-30; 0730	7:30 7:30 am 7 h 30 m 7:3 730 7.30 pm 073 07.3
If the answer 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

Question	Answer	Marks	Further Information
1	$250 \div 10 = 25$ ✓ $15 \times 10 = 1500$ x $90 \div 10 = 900$ x $12 \times 100 = 1200$ ✓	**2**	Award 2 for all 4 correct.
	3 correct	**B1**	
2(a)	3 2 + 6 8 = 1 0 0	**1**	
2(b)	8 5 0 + 1 5 0 = 1 0 0 0	**1**	
3	14:25	**1**	Accept 2:25 pm
4	396 (marbles)	**1**	
5	5139	**1**	
6(a)	5 (cm) and 3 (cm)	**1**	Accept 4.9 to 5.1 for 5 Accept 2.9 to 3.1 for 3
6(b)	16 (cm)	**1**	Accept correct **FT** from part **(a)**

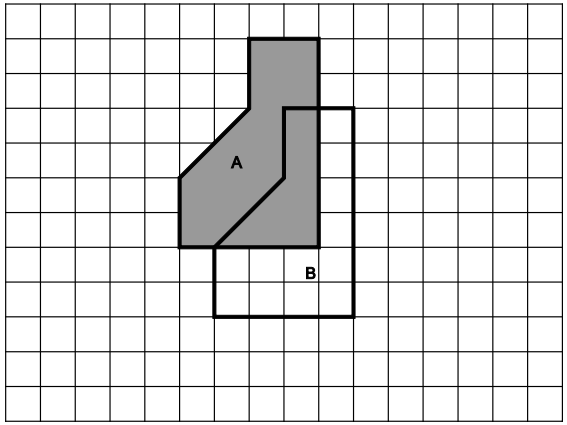
Question	Answer	Marks	Further Information
7	degrees 4	**1**	Accept ° Accept radians. Both answers must be correct for the mark. Accept recognisable misspellings.
8	14 (km)	**1**	
9		**1**	Accept some inaccuracy in lines provided intention is clear. Both answers must be correct for the mark.
10		**1**	Award 1 mark for all 3 lines correct. Allow mark if the positions on the number line are correctly labelled with $\frac{1}{2}$, 0.9, $\frac{3}{10}$
11	(3, 6)	**1**	Correct order only.

Question	Answer	Marks	Further Information
12	Angelique circled and an explanation that 50% = 25 out of 50 **or** 60% = 30 out of 50	**1**	Both parts of the answer must be correct for the award of the mark.
13(a)	25 (°C)	**1**	
13(b)		**1**	Last two points do not need to be joined for 1 mark.

Question	Answer	Marks	Further Information
14	32 × 20 = 640 640 – 32 = 608	**2**	The working and answer must be shown for 2 marks.
	For correct working without the answer.	**M1**	Award only one of these.
	Answer only **or** correct answer using long multiplication.	**B1**	
	Correct method containing arithmetic errors, for example: (32 × 20) – 32 = wrong answer.	**M1**	
15	24 (students)	**1**	
16(a)	24 **and** 309	**1**	Both answers must be correct for 1 mark. Do not allow 10, 10, 4 or 100, 100, 100, 9
16(b)		**1**	Accept any arrangement of the correct symbols.
17	0 **and** 8	**1**	Both digits must be correct for the award of the mark.
18	115.18	**1**	
19(a)	51 (c)	**1**	
19(b)	Hassan	**1**	

Question	Answer	Marks	Further Information
20	**196** 574 **1144** **728** 1026	**1**	All 3 must be circled and no others for 1 mark.
21	8 24 12	**2**	Award 2 marks for all 3 correct.
	2 correct	**B1**	
22	**One from**  **And one from** 	**2**	Correct 4 by 2 face. Accept any one of these answers. Correct 2 by 3 face. Accept any one of these answers.
	One face correct	**B1**	

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Further Information</th></tr>
<tr><td rowspan="2">23</td><td>Any two from:
50 × 60 = 3000 or 60 × 50 = 3000
50 × 80 = 4000 or 80 × 50 = 4000
50 × 20 = 1000 or 20 × 50 = 1000</td><td>2</td><td>Condone correct 3-digit by 2-digit answers, e.g. 120 × 50 = 6000</td></tr>
<tr><td>one correct calculation</td><td>B1</td><td></td></tr>
<tr><td rowspan="2">24</td><td rowspan="2"><table><tr><th>Calculation</th><th>Decimal</th><th>Mixed number</th></tr><tr><td>13 ÷ 2</td><td>6.5</td><td>$6\frac{1}{2}$</td></tr><tr><td>32 ÷ 5</td><td>6.4</td><td>$6\frac{2}{5}$ or $6\frac{4}{10}$</td></tr><tr><td>23 ÷ 4</td><td>5.75</td><td>$5\frac{3}{4}$</td></tr></table></td><td>2</td><td>Award 2 marks for all 4 answers correct.</td></tr>
<tr><td>B1</td><td>Award 1 mark for 2 or 3 answers correct.

Accept equivalent mixed numbers, e.g. $5\frac{75}{100}$</td></tr>
<tr><td>25</td><td>  </td><td>1</td><td>The diagram must be sufficiently accurate for the intention to be clear.</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Further Information</th></tr>
<tr><td>26</td><td>0.5 (litres)</td><td>1</td><td>Allow half a litre or equivalent.
Do not accept answers in ml.</td></tr>
<tr><td rowspan="2">27</td><td rowspan="2"><table>
<tr><th></th><th>Multiple of 8</th><th>Not a multiple of 8</th></tr>
<tr><th>Multiple of 6</th><td>72</td><td>42</td></tr>
<tr><th>Not a multiple of 6</th><td>32</td><td>52 62</td></tr>
</table></td><td>2</td><td>Award 2 marks for 4 numbers correctly placed.</td></tr>
<tr><td>B1</td><td>Award 1 mark for 3 numbers correctly placed.</td></tr>
<tr><td>28</td><td>102 mm, 10.4 cm, 0.12 m, 125 mm</td><td>1</td><td>Accept:
102 mm, 104 mm,
120 mm, 125 mm or equivalent.

Accept answers without units.</td></tr>
</table>