Cambridge Assessment International Education

Cambridge Primary Checkpoint

MATHEMATICS **0845/02**

Paper 2 **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; $0.30c; $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.....; $.....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.

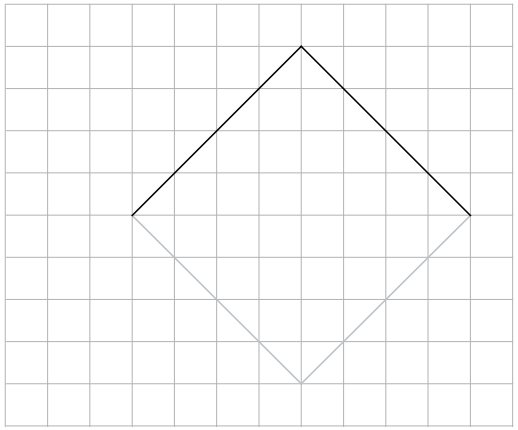
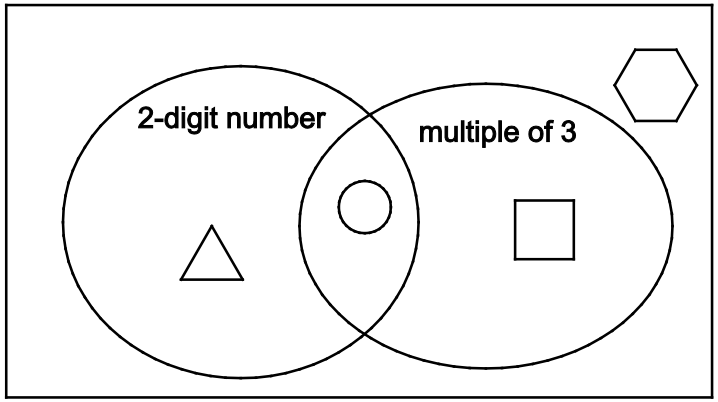
Accept	Do not accept
Any unambiguous indication using any reasonable abbreviations of hours (h, hr, hrs), minutes (m, min, mins) and seconds (s, sec, secs), e.g. 2 hours 30 minutes; 2 h 30 m; 02 h 30 m Any correct conversion with appropriate units, e.g. 2.5 hours; 150 mins **unless** the question specifically 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

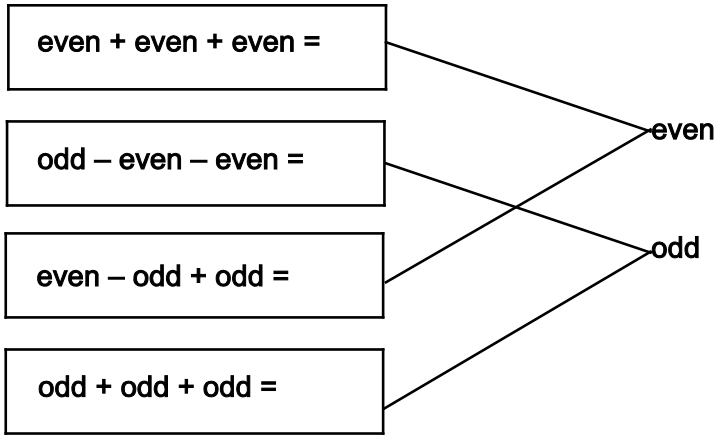
The table below gives guidance for answers involving time. It shows acceptable and unacceptable versions of the answer 07:30

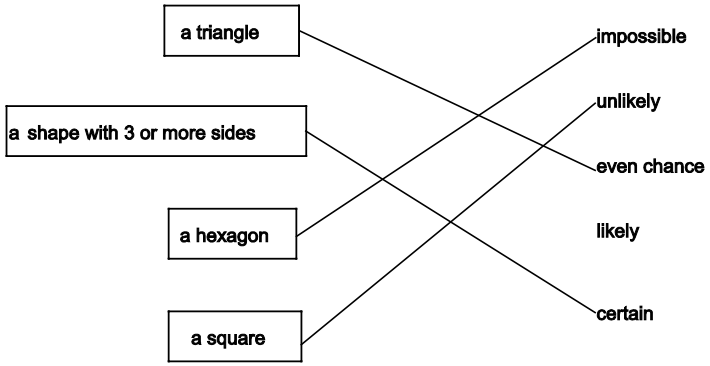
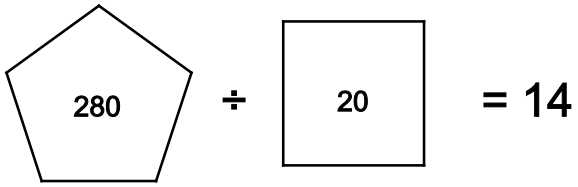
	Accept	Do not accept
If the answer is required in 24-hour format	Any unambiguous indication of correct answer in numbers, words or a combination of the two, e.g. 07:30 with any separator in place of the colon, e.g. 07 30; 07,30; 07-30; 0730	7:30 7:30 am 7 h 30 m 7:3 730 7.30 pm 073 07.3
If the answer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

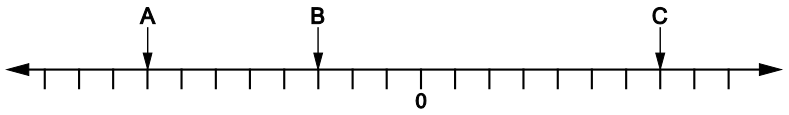
Question	Answer	Marks	Further Information
1	20 (June)	**1**	June not needed.
2	$\frac{1}{2}$ **and** 0.5	**1**	Both answers must be given for the mark.
3	4 4 5 + 5 5 5 = 1000 **or** 4 5 5 + 5 4 5 = 1000 **or** 5 5 5 + 4 4 5 = 1000 **or** 5 4 5 + 4 5 5 = 1000	**1**	

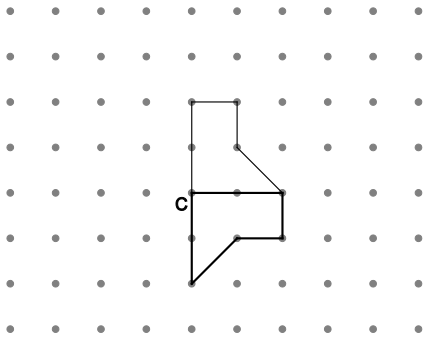
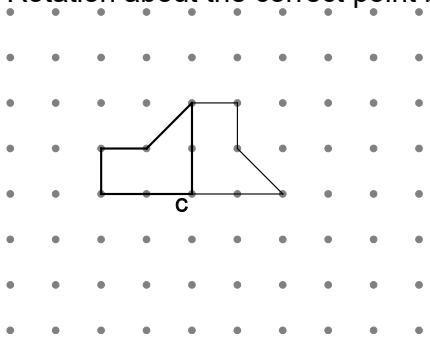
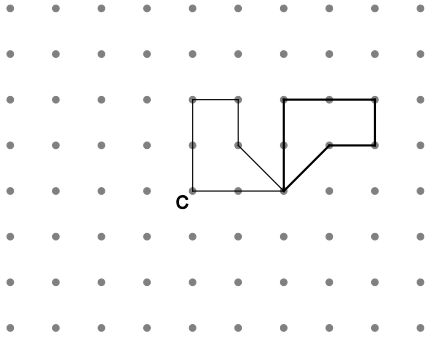
Question	Answer	Marks	Further Information
4		**1**	The diagram must be sufficiently accurate for the intention to be clear.
5		**2**	All four symbols correctly placed.
	2 or 3 symbols correctly placed	**B1**	
6	6005 ✓ 6500 ☐ 7055 ✓ 7905 ☐	**1**	Do not accept any additional ticks. Accept any other clear indication of the correct answer.

Question	Answer	Marks	Further Information
7	20	**1**	
8	09:30 or 21:30 **and** 01:50 or 13:50	**1**	Both answers must be correct for 1 mark. Accept 9:30 1:50 Ignore any references to am and pm**.**
9	8250	**1**	Award 1 mark for any number from 8000 to 8500 inclusive.
10	433 112	**1**	
11	3 hundreds 3 hundredths 3 tens (3 tenths) 3 units	**1**	
12	66 (º)	**1**	
13	73 (mm)	**1**	Accept 71-75 (mm) inclusive. Do not accept 7.3 cm.

Question	Answer	Marks	Further Information
14		**2**	All four lines must be correct for 2 marks.
	3 correct	**B1**	
15	Monday	**1**	
16	170 + 85 + 17 + 17 = 289	**2**	Accept numbers in any order.
	Correct numbers with wrong total **or** Correct numbers without a total	**B1**	

Question	Answer	Marks	Further Information
17		**2**	All four correct for 2 marks.
	2 or 3 joined correctly.	**B1**	
18	<table><tr><th>Number</th><th>Factors</th></tr><tr><td></td><td></td></tr><tr><td></td><td>1 2 3 6 9 18</td></tr><tr><td>12</td><td></td></tr></table>	**2**	Accept correct factors in any order.
	one correct row	**B1**	
19		**1**	

Question	Answer	Marks	Further Information
20(a)		**1**	Allow arrow at –26 if scale extended correctly.
20(b)	–16	**1**	Do not accept 16–
21	16 (cm^2)	**1**	
22	2 × 5 × 11	**1**	Award 1 mark for all three numbers in any order.

Question	Answer	Marks	Further Information
23		**2**	Accept slight inaccuracies in the drawing.
	Rotation about the correct point but anticlockwise, i.e.: 	**B1**	Award only 1 of these.
	Rotation of 90° but about the wrong point, e.g.: 	**B1**	

Question	Answer	Marks	Further Information
24	2 2 3 4 6 **or** 2 2 2 5	**2**	Numbers can be in any order.
	The cards have a mode of 2	**B1**	Award only 1 of these.
	The cards have a range of 4	**B1**	
25	$1\frac{2}{5}$	**1**	Accept equivalent mixed numbers. Do not accept improper fractions.
26	($)11.52	**2**	
	Sight of ($)7.56 or ($)3.96	**B1**	Award only 1 of these.
	A correct method containing any number of arithmetic errors. e.g. 60 ÷ 10 × ($)1.26 + 60 ÷ 15 × ($)0.99	**M1**	

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Further Information</th></tr>
<tr><td rowspan="2">27</td><td>
<table>
<tr><th>Fraction</th><th>Simplest form</th></tr>
<tr><td>$\frac{16}{20}$</td><td>$\mathbf{\frac{4}{5}}$</td></tr>
<tr><td>$\frac{6}{20}$</td><td>$\mathbf{\frac{3}{10}}$</td></tr>
<tr><td>$\frac{15}{20}$</td><td>$\mathbf{\frac{3}{4}}$</td></tr>
</table>
</td><td>2</td><td></td></tr>
<tr><td>Two correct</td><td>B1</td><td></td></tr>
<tr><td>28</td><td>(2) (4 $\frac{2}{3}$) 5 6 $\frac{1}{3}$ (10)</td><td>1</td><td></td></tr>
<tr><td>29</td><td>1.5 miles 3200 m 6.4 km 4.5 miles</td><td>1</td><td>Accept answers without units.

Accept answers converted to same units
i.e.:
2.4 km, 3.2 km, 6.4 km, 7.2 km
or
1.5 miles, 2 miles, 4 miles, 4.5 miles</td></tr>
</table>

Question	Answer	Marks	Further Information
30	An explanation that shows the answer is **divided by 100**, e.g. • 138 ÷ 100 = (1.38) • divide by 100	**1**	The answer 1.38 is not required. Do not accept 1.38 without a correct explanation. Do not accept an explanation which involves moving the decimal point.

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