



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge International Primary Achievement Test

MATHEMATICS

0842/01

Paper 1

October/November 2008

MARK SCHEME

Maximum Mark : 39

IMPORTANT NOTICE

Mark Schemes have been issued on the basis of **one** copy per Assistant examiner and **two** copies per Team Leader.



This document consists of **11** printed pages and **1** blank page.



Mathematics mark schemes – Achievement Test

Guidelines for marking test papers

These mark schemes are designed to provide you with all the information necessary to mark the Primary Mathematics Achievement Tests. As far as possible, the mark schemes give you full guidance regarding acceptable and unacceptable alternative answers and, where appropriate, include examples of student work to illustrate the marking points. However, it is not always possible to predict all the alternative answers that may be produced by students and there could be places where the marker will have to use their professional judgement. In these cases it is essential that such judgement be applied consistently.

The guidelines below should be followed throughout (**unless the mark scheme states otherwise**):

- A correct answer should always be awarded full marks even if the working shown is wrong.
- Where more than one mark is available for a question the mark scheme explains where each mark should be awarded. In some cases marks are available for demonstration of the correct method even if the final answer is incorrect. The method marks can be awarded if the correct method is used but a mistake has been made in the calculation, resulting in a wrong answer. Method marks can also be awarded if the calculation is set up and performed correctly but incorrect values have been used, e.g. due to misreading the question or a mistake earlier in a series of calculations.
- If a question uses the answer to a previous question or part question that the student answered incorrectly, all available marks can be awarded for the latter question if appropriate calculations are performed correctly using the value carried forward. Places where such consideration should be made are indicated in the mark schemes. In these cases, it is not possible to provide all the alternative acceptable answers and the marker must follow the student's working to determine whether credit should be given or not.
- Half marks should not be awarded and at no point should an answer be awarded more than the maximum number of marks available, regardless of the quality of the answer.
- If the student has given more than one answer, the marks can be awarded if all the answers given are correct. However, if correct and incorrect answers are given together, marks should not be awarded (marks for correct working out can still be gained).
- If the answer line is blank but the correct answer is given elsewhere, e.g. an annotation on a graph or at the end of the working out, the marks can be awarded provided it is clear that the student has understood the requirements of the question.
- If the response on the answer line is incorrect but the correct answer is shown elsewhere, full marks can still be awarded if the student has made the error when copying the answer onto the answer line. If the incorrect final answer is the result of redundant additional working after the correct answer had been reached, the marks can be awarded provided the extra work does not contradict that already done.

- Each question and part question should be considered independently and marks for one question should not be disallowed if they are contradicted by working or answers in another question or part question.
- Any legible crossed-out work that has not been replaced can be marked; but, if work has been replaced, the crossed-out part should be ignored.
- If the student's response is numerically or algebraically equivalent to the answer in the mark scheme, the mark should be given unless a particular form of answer was specified by the question.
- Diagrams, symbols or words are acceptable for explanations or responses.
- Where students are required to indicate the correct answer in a specific way, e.g. by underlining, marks should be awarded for any unambiguous indication, e.g. circling or ticking.
- Any method of setting out working should be accepted.
- Standard rules for acceptable formats of answers involving units, money, duration and time are given overleaf.

Each question on the test paper has a box beside it for the teacher to record the mark obtained. It is advisable to use these boxes so that students, and others looking at the test papers, can clearly see where the marks have been awarded.

It should also be noted that marking in red ink and using the mark boxes is an essential requirement for the Achievement tests.

General rules for alternative answers

In most places on the mark schemes acceptable and unacceptable alternative answers are given in detail, however some general rules are given overleaf and are not necessarily repeated in full for each question that they apply.

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
Always accept appropriate trailing zeros, e.g. 3.00m; 5.000kg
Accept a comma as a decimal point if that is that convention that you have taught the students, e.g. 0,638

Units

For questions involving quantities, e.g. length, mass, time or money, correct units must be given in the answer. The table shows acceptable and unacceptable versions of the answer 1.85m.

	Correct answer	Also accept	Do not accept
Units are not given on answer line and question does not specify unit for the answer.	1.85m	Correct conversions provided that the unit is stated, e.g. 1m 85cm 185cm 1850mm 0.00185km	1.85 185m
If the unit is given on the answer line, e.g.m1.85..... m	Correct conversions, provided the unit is stated unambiguously, e.g.185cm..... m185.....m1850..... m etc.
If the question states that the answer should be given in a specified unit, e.g. "Give your answer in metres"	1.85m	1.85 1m 85cm	185; 1850 Any conversions to other units, e.g. 185cm

Note: if the answer line is left blank but the correct answer is given elsewhere on the page, it can be marked correct if the units match those on the answer line or are unambiguously stated.

Money

For questions involving money, it is essential that appropriate units are given in the answer.

The table shows acceptable and unacceptable versions.

	Accept	Do not accept
If the amount is in dollars and cents, the answer should be given to two decimal places.	\$0.30 \$9 or \$9.00	
If units are not given on the answer line	Any unambiguous indication of the correct amount, e.g. 30 cents; 30 c \$0.30; \$0.30c; \$0.30cents \$0-30; \$0=30; \$0:30	30 or 0.30 without a unit Incorrect or ambiguous answers, e.g. \$0.3; \$30; \$30cents; 0.30cents
If \$ is shown on the answer line	\$..... 0.30 \$..... 0.30 cents Accept all unambiguous indications, as shown above	\$..... 30 \$..... 30 cents (this cannot be accepted because it is ambiguous, but if the dollar sign is deleted it becomes acceptable)
If cents is shown on the answer line 30cents \$0.30cents 0.30cents \$30cents

Duration

Accept any unambiguous method of showing duration and all reasonable abbreviations of hours (h, hr, hrs), minutes (m, min, mins) and seconds (s, sec, secs).




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; 2h 30m; 02h 30m 5 min 24 sec; 00h 05m 24s	Incorrect or ambiguous formats, e.g. 2.30; 2.3; 2.30 hours; 2.30 min; 2h 3; 2.3h
Any correct conversion with appropriate units, e.g. 2.5 hours; 150 mins 324 seconds	2.5; 150 324
Also accept unambiguous digital stopwatch format, e.g. 02:30:00 00:05:24; 05:24s	Do not accept ambiguous indications, e.g. 02:30 5.24

Time

There are many ways to write times, in both numbers and words, and marks should be awarded for any unambiguous method. Accept time written in numbers or words unless there is a specific instruction in the question. Some examples are given in the table.

Accept	Do not accept
<p>Any unambiguous indication of correct answer in numbers, words or a combination of the two, e.g. 07:30, 19:00</p> <p>0730; 07 30; 07.30; 07.30; 07-30; 7.30; 730 a.m.; 7.30am; 7.30 in the morning</p> <p>Half past seven (o'clock) in the morning Thirty minutes past seven am Also accept: O-seven-thirty</p> <p>1900; 19 00; 19_00 etc.</p> <p>Nineteen hundred (hours) Seven o'clock in the afternoon/evening</p> <p>Accept correct conversion to 12-hour clock, e.g. 16:42 4:42 p.m.</p> <p>Sixteen forty two Four-forty-two in the afternoon/evening Four forty two p.m. Forty two (minutes) past four p.m. Eighteen (minutes) to five in the evening</p> <p>Also accept a combination of numbers and words, e.g. 18 minutes to 5 p.m. 42 minutes past 4 in the afternoon</p>	<p>Incorrect or ambiguous formats, e.g.</p> <p>07.3; 073; 07 3; 730; 73; 7.3; 7.3am; 7.30p.m</p> <p>19; 190; 19 000; 19.00am; 7.00am</p> <p>4.42am; 0442; 4.42</p> <p>Forty two (minutes) past sixteen Eighteen (minutes) to seventeen</p>

Question	Mark	Answer	
1 2Nn3	1	Accept any answers that indicate 'add 4' or '+ 4'	e.g. each number is 4 more (bigger)

Question	Mark	Answer	
2 2Nc3	1	 Can be any number  Must be the answer to  + 8	

Question	Mark	Answer	
3 2Ss1	1	3	

Question	Mark	Answer	
4 2P5	1	(\$) 56	

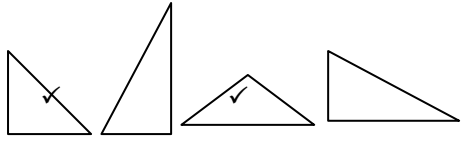
Question	Mark	Answer	
5 2D1	1	5	

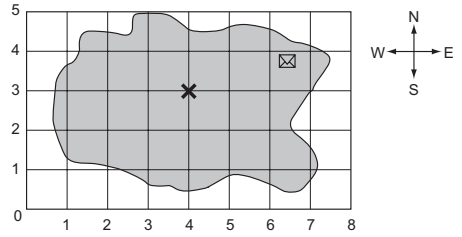
Question	Mark	Answer	
6a 3Nc7	1	(\$) 27	
b 3Nc7	1	3 (seats)	

Question	Mark	Answer	
7 3Sm8	1	Saturday	

Question	Mark	Answer	
8 4Nn13	1	25(g)	

Question	Mark	Answer	
9 4Nc8	1	7 x 4 should be corrected to = 28, not = 27 9 x 4 should be corrected to = 36, not = 35	Both correct for 1 mark

Question	Mark	Answer	
10 4Ss2	1		Both correct for 1 mark. Accept any indication to show the correct answer.

Question	Mark	Answer	
11a 4Sp2	1	NE accept northeast	
b 4Sp4	1		Any indication will do.

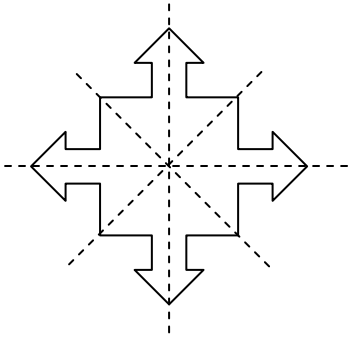
Question	Mark	Answer	
12 4Sm2	1	Accept either 3.95 m or 3m 95cm	Also accept 3950mm

Question	Mark	Answer	
13 4P5	1	30 (legs)	

Question	Mark	Answer		
14	4P1	3	<p>1 mark for evidence of 10 hooks cost \$3.70 and 4 floats cost \$7.20</p> <p>1 mark for evidence of Total cost of items = \$3.70 + \$7.20 + \$15.50 = \$26.40</p> <p>1 mark for evidence of Change from \$50 = \$50 - \$26.40 = \$23.60</p>	3 marks in total

Question	Mark	Answer		
15a	4D2	1	15	Do not accept tally
b	4D2	1	Scooter IIII IIII IIII II	

Question	Mark	Answer		
16a	5Nn3	1	<u>24 645</u> <u>23 690</u> <u>23 546</u>	
b	5Nn3	1	any one answer 25 235 to 25 244 inclusive	

Question	Mark	Answer		
17	5Ss3	1		<p>All 4 lines correct for 1 mark.</p> <p>Allow any indication of the correct lines of symmetry.</p>

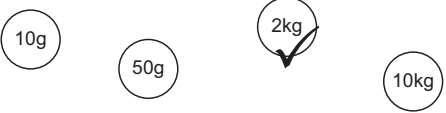
Question	Mark	Answer		
18	5P6	2	18.9(kg)	2 marks for correct answer. If working includes a method of finding 5% of 18 eg. $18 \div 10 \div 2 = 0.9$, award 1 mark even if final answer is incorrect

Question	Mark	Answer		
19a	5P4	1	Length plus length plus width plus width or 2 x length add 2 x width or 2 x (length +width)	Any equivalent statement is acceptable.
b	5P4	1	280 (m)	

Question	Mark	Answer		
20	6Nn15	1	7.05, 7.5, 70.5, 75.05, 75.5	

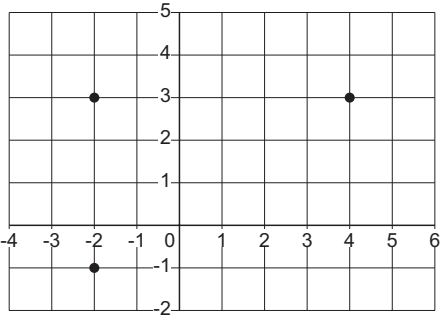
Question	Mark	Answer		
21	6Nc8	2	13.7	2 marks for correct answer. Allow 1 mark if a correct method is shown but final answer is incorrect. E.g. $\begin{array}{r} 5 \overline{) 68.5} \\ \underline{- 50.0} \quad 10 \times 5 \\ 18.5 \\ \underline{- 15.0} \quad 3 \times 5 \\ 3.5 \\ \underline{- 3.5} \quad 0.7 \times 5 \\ 0.0 \end{array}$ $\begin{array}{r} 13.7 \\ 5 \overline{) 68.35} \end{array}$

Question	Mark	Answer		
22	6Ss3	1	Net B	

Question	Mark	Answer	
23a 6Sm4	1		Accept any indication of 2kg.
b 6Sm4	1	73mm	Accept answers from 71 to 75mm

Question	Mark	Answer	
24 6D1	2	A 1 to 6 dice will land on an even number	1 mark
		Sam will choose a red sweet from a bag containing 4 red and 4 blue sweets.	1 mark

Question	Mark	Answer	
25a 6Nn20	1	4	
b 6Nn20	1	13	

Question	Mark	Answer	
26a 6Sp1	1		
b 6Sp1	1	(4 , -1)	

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