



Cambridge Assessment
International Education

Cambridge Primary Sample Test
For use with curriculum published in
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Mathematics Paper 2
Mark Scheme
Stage 6

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 1.85 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..... 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; 30 c \$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.....; \$.....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.\$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 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

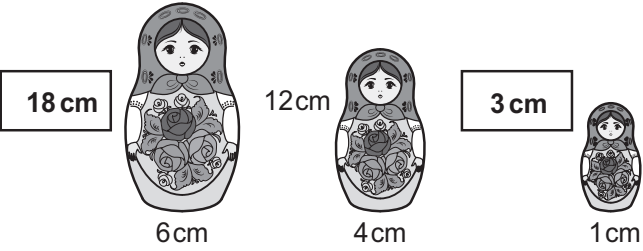
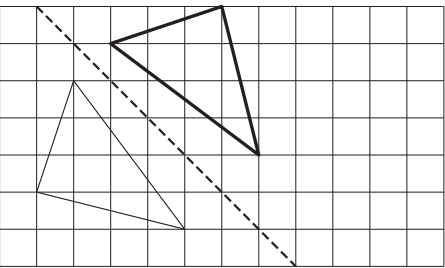
The table shows acceptable and unacceptable versions of the answer -2 .


| Accept | Do not accept |
|---------------|----------------------|
| -2 | $2-$ |

| Question | Answer | Mark | Part Marks | Guidance | | | | | | | | | | | | |
|-------------------------------|---|------------|------------|--|----------------------------|------------|-------|----------------|-------|------------|-------------------------------|-------------|------------|---|---|--|
| 1 | 24 (cm ²) | 1 | | | | | | | | | | | | | | |
| 2 | $\frac{1}{8}$ | 1 | | Accept equivalent fractions. Accept 0.125 | | | | | | | | | | | | |
| 3 | 3.0067 3.067 30.0067 <u>30.067</u> 30.67 | 1 | | Accept any clear indication. | | | | | | | | | | | | |
| 4(a) | A B C D | 1 | | Accept any clear indication. | | | | | | | | | | | | |
| 4(b) | bar chart <input type="checkbox"/> waffle diagram <input type="checkbox"/> pie chart <input type="checkbox"/> scatter graph <input checked="" type="checkbox"/> line graph <input type="checkbox"/> | 1 | | Accept any clear indication. | | | | | | | | | | | | |
| 5 | <table border="1"> <thead> <tr> <th>Fraction</th> <th>Decimal</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>$\left(\frac{1}{2}\right)$</td> <td>0.5</td> <td>(50%)</td> </tr> <tr> <td>$\frac{3}{10}$</td> <td>(0.3)</td> <td>30%</td> </tr> <tr> <td>$\left(\frac{63}{100}\right)$</td> <td>0.63</td> <td>63%</td> </tr> </tbody> </table> | Fraction | Decimal | Percentage | $\left(\frac{1}{2}\right)$ | 0.5 | (50%) | $\frac{3}{10}$ | (0.3) | 30% | $\left(\frac{63}{100}\right)$ | 0.63 | 63% | 2 | Award 1 mark for three or four correct entries. | Accept equivalent fractions for $\frac{3}{10}$ Accept equivalent decimals for 0.5 and 0.63, e.g. 0.50 and .63 |
| Fraction | Decimal | Percentage | | | | | | | | | | | | | | |
| $\left(\frac{1}{2}\right)$ | 0.5 | (50%) | | | | | | | | | | | | | | |
| $\frac{3}{10}$ | (0.3) | 30% | | | | | | | | | | | | | | |
| $\left(\frac{63}{100}\right)$ | 0.63 | 63% | | | | | | | | | | | | | | |

| Question | Answer | Mark | Part Marks | Guidance | | | | | | |
|----------------------|--|-----------------------------|----------------------------|---|---|--------|---|---|--|-------------------------------------|
| 6 | <table border="1"> <tr> <td>No lines of symmetry</td> <td>Exactly 1 line of symmetry</td> <td>Exactly 2 lines of symmetry</td> </tr> <tr> <td>Z</td> <td>A C</td> <td>H</td> </tr> </table> | No lines of symmetry | Exactly 1 line of symmetry | Exactly 2 lines of symmetry | Z | A C | H | 1 | | All four correct for 1 mark. |
| No lines of symmetry | Exactly 1 line of symmetry | Exactly 2 lines of symmetry | | | | | | | | |
| Z | A C | H | | | | | | | | |
| 7 | $6.043 \times \boxed{1000} \div \boxed{10} = 604.3$ | 1 | | | | | | | | |
| 8(a) | circumference | 1 | | Accept recognisable misspellings. | | | | | | |
| 8(b) | diameter, radius | 1 | | Correct order required. Accept recognisable misspellings. | | | | | | |
| 9 | Banana and an explanation that states that the bar for banana is twice as tall as the one for mango. E.g. 12 choose mango and 24 choose banana or because 2×12 is 24 | 1 | | | | | | | | |
| 10 | 12 | 1 | | | | | | | | |
| 11(a) | (\$)21 | 1 | | | | | | | | |
| 11(b) | 84 (kg) | 1 | | | | | | | | |

| Question | Answer | Mark | Part Marks | Guidance |
|----------|---|------|---|--|
| 12 | <p>A bottle with a capacity of $\frac{1}{2}$ litre can hold a volume of 1 litre. <input type="checkbox"/></p> <p>A bottle with a capacity of 1 litre can hold a volume of 1 litre. <input checked="" type="checkbox"/></p> <p>A bottle with a capacity of 1 litre can hold a volume of $\frac{1}{2}$ litre. <input checked="" type="checkbox"/></p> | 1 | | <p>Accept × for blank.</p> <p>Accept any clear indication.</p> |
| 13 | A circle of 5 cm radius with centre A | 1 | | Accept radius of ± 1 mm. |
| 14 | <p>An even number in the sequence always follows an odd number <input checked="" type="checkbox"/></p> <p>The first negative number Oliver says is -4 <input type="checkbox"/></p> <p>Yuri says the number 64 <input checked="" type="checkbox"/></p> <p>The first 3 digit number Yuri says is 100 <input type="checkbox"/></p> <p>Oliver says -121 <input checked="" type="checkbox"/></p> | 2 | Award 1 mark for three correct ticks and one incorrect tick or two correct ticks and no other ticks. | <p>Accept × for blank.</p> <p>Accept any clear indication.</p> |

| Question | Answer | Mark | Part Marks | Guidance | | | | | | | | | | | | |
|-----------|---|------------------|---|---|-------|-----|------|-----------|-----|----------|-------|----------|-----------|---|--|--|
| 15 | A correct explanation, e.g. stating that the 2 events can happen at the same time or some odd numbers are less than 4 or 3 is odd and it is also less than 4 | 1 | | | | | | | | | | | | | | |
| 16 |  | 2 | Award 1 mark for one correct answer. | | | | | | | | | | | | | |
| 17 | <table border="1" data-bbox="296 813 873 1062"> <thead> <tr> <th>Flour (g)</th> <th>Eggs</th> <th>Number of people</th> </tr> </thead> <tbody> <tr> <td>(120)</td> <td>(3)</td> <td>(15)</td> </tr> <tr> <td>40</td> <td>(1)</td> <td>5</td> </tr> <tr> <td>(240)</td> <td>6</td> <td>30</td> </tr> </tbody> </table> | Flour (g) | Eggs | Number of people | (120) | (3) | (15) | 40 | (1) | 5 | (240) | 6 | 30 | 2 | Award 1 mark for two or three correct. | |
| Flour (g) | Eggs | Number of people | | | | | | | | | | | | | | |
| (120) | (3) | (15) | | | | | | | | | | | | | | |
| 40 | (1) | 5 | | | | | | | | | | | | | | |
| (240) | 6 | 30 | | | | | | | | | | | | | | |
| 18 |  | 1 | | Accept some inaccuracies in the drawing as long as the intention is clear. | | | | | | | | | | | | |

| Question | Answer | Mark | Part Marks | Guidance |
|----------|---|------|--|---|
| 19(a) | 4 | 1 | | |
| 19(b) | 2.5 | 1 | | Accept equivalent answers. |
| 20(a) | 36 (cm) | 1 | | |
| 20(b) | 7 (cm) | 1 | | |
| 21 | 102 (°) | 2 | Award 1 mark for 78 seen or for full method $24 + (180 - 24)/2$ | Accept equivalent methods. |
| 22(a) | Point plotted at (8, 7) | 1 | | |
| 22(b) | 9 | 1 | | |
| 23 |  | 2 | Award 1 mark for exactly two correct or for three right and one wrong. | Accept × for blank. Accept any clear indication. |
| 24(a) | $5 \times (4 + 3 \times 2) = 50$ | 1 | | |
| 24(b) | $7 + 5 \times (1 + 3) - 4 = 23$ | 1 | | |
| 25 | 16 | 1 | | |
| 26 | 9 (cm) | 2 | Award 1 mark for sight of 81 | |

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