

Cambridge Primary Progression Test Mathematics 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 aren't 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.g675 |
| 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.g185 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 |
| 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; \$0-30 | \$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 | 30cents | 0.30cents Ambiguous answers, e.g\$30cents;\$0.30cents unless units on the answer line have been deleted, e.g\$0.30eents |

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 | 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) 02:30 (as this is a 24-hour clock time, not a time interval) 2.5; 150 |
| given in hours and minutes | |

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. | Absence of am or pm 1930 am 7 h 30 m 7:3 |
| | 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. | |

Negative numbers

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

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

Stage 6 Paper 1 Mark scheme

| Question | 1 | | |
|----------|------|--|--|
| Part | Mark | Answer | Further Information |
| | 1 | 0.25 0.62 0.38 0.81 0.56 0.75 0.19 | All three lines must be correct for the award of the mark. |
| Total | 1 | | |

| Question | 2 | | |
|----------|------|--|--|
| Part | Mark | Answer | Further Information |
| | 1 | -6-5-4/3\2-10 1 2 3 4 5 6 -6-5-4/3\2-10 1 2 3 4 5 6 -2 A A A A A A A A A A A A A A A A A A A | Accept slight inaccuracies in the drawing provided the intention is clear. |
| Total | 1 | | |

| Question | 3 | | | |
|----------|------|----------------------------|-------|---------------------------------|
| Part | Mark | Answei | r | Further Information |
| | 2 | 9810 | 9018 | Award 1 mark for any 3 correct. |
| | | Half a million | 84291 | |
| | | Fifteen thousand and seven | 15060 | |
| | | 25 | -52 | |
| | | -271 | -326 | |
| Total | 2 | | | 1 |

| Question | 4 | | |
|----------|------|------------------|--|
| Part | Mark | Answer | Further Information |
| | 1 | Three hundredths | Do not accept hundredths alone. Condone $\frac{3}{100}$. |
| Total | 1 | | 100 |

| Question | 5 | | |
|----------|------|-----------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | (\$)24.18 | |
| Total | 1 | | |

| Question | 6 | | |
|----------|------|-----------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 1.085 (m) | |
| Total | 1 | | |

| Question | 7 | | |
|----------|------|--|---|
| Part | Mark | Answer | Further Information |
| | 1 | Arrow drawn to 16.5, as shown: 10 kg 20 | The arrow does not have to touch the scale if the intention is clear. |
| Total | 1 | | |

| Question | 8 | | |
|----------|------|--------|-------------------------|
| Part | Mark | Answer | Further Information |
| | 1 | Manjit | Condone 14.5 (seconds). |
| Total | 1 | | |

| Question | 9 | | | |
|----------|------|-----|------|-----------------------------------|
| Part | Mark | Ans | swer | Further Information |
| | 1 | | | Both boxes ticked with no extras. |
| Total | 1 | | | |

| Question | 10 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 1000 | |
| Total | 1 | | |

| Question | 11 | | |
|----------|------|--------------------|--|
| Part | Mark | Answer | Further Information |
| (a) | 1 | 8 am or equivalent | Do not accept 8:00 or eight o'clock unless morning is clear. |
| (b) | 1 | 3 pm or equivalent | Do not accept 3:00 or three o'clock unless afternoon is clear. |
| Total | 2 | | |

| Question | 12 | | |
|----------|------|--------|---|
| Part | Mark | Answer | Further Information |
| | 1 | 270 | Both answers must be correct for the award of the mark. |
| | | 5.5 | |
| Total | 1 | | |

| Question | 13 | | | |
|----------|------|--------------------------------|------------------------------|--------------------------------------|
| Part | Mark | Answei | r | Further Information |
| | 2 | $\frac{7}{10} = \frac{17}{10}$ | $2\frac{1}{4} = \frac{9}{4}$ | Award 2 marks for 3 correct answers. |
| | | $\frac{2}{5} = \frac{17}{5}$ | $3\frac{1}{2} = \frac{7}{2}$ | Award 1 mark for 2 correct answers. |
| Total | 2 | | | |

| Question | 14 | | |
|----------|------|---|--|
| Part | Mark | Answer | Further Information |
| | 1 | The number is a multiple of 4 The number has 4 digits. The number is odd. In a multiple of 4 The number has 4 digits. The number is odd. | Both lines must be drawn for the mark. |
| Total | 1 | | |

| Question | 15 | | |
|----------|------|-----------------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 1500 and 20 000 | |
| Total | 1 | | |

| Question | 16 | | |
|----------|------|---------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | (\$) 14 | |
| Total | 1 | | |

| Question | 17 | | |
|----------|------|----------------------------------|---|
| Part | Mark | Answer | Further Information |
| | 2 | Rajiv, Hassan and Youssef | Award 2 marks for 3 correct answers with no incorrect answers. Award 1 mark for 2 correct answers with no more than 1 extra. |
| Total | 2 | | |

| Question | 18 | | |
|----------|------|--------|--------------------------------------|
| Part | Mark | Answer | Further Information |
| (a) | 1 | 10:47 | |
| (b) | 1 | 13:02 | Do not accept 1.02 pm. |
| | | | Accept follow through from part (a). |
| Total | 2 | | |

| Question | 19 | | | | | | |
|----------|------|---|-----|--------|-----|-----|---------------------------------|
| Part | Mark | | | Answer | , | | Further Information |
| | 2 | | | | ı | | Award 1 mark for 2 or 3 correct |
| | _ | × | 0.3 | 0.1 | 0.6 | 0.4 | answers. |
| | | 7 | 2.1 | 0.7 | 4.2 | 2.8 | |
| | | 4 | 1.2 | 0.4 | 2.4 | 1.6 | |
| | | | | | | | |
| Total | 2 | | | | | | |

| Question | 20 | | |
|----------|------|-------------|--|
| Part | Mark | Answer | Further Information |
| | 2 | 255 and -45 | Do not accept 45 Award 1 mark for 1 correct answer. |
| Total | 2 | | |

| Question | 21 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| (a) | 1 | 33(°) | Allow 32°-34°. |
| (b) | 1 | 158(°) | |
| Total | 2 | | |

| Question | 22 | | |
|----------|------|-------------------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 3 • 5 8 + 2 • 0 5 | |
| | | 5 • 6 3 | |
| Total | 1 | | I |

| Question | 23 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| (a) | 1 | 7450.3 | |
| (b) | 1 | 603.19 | |
| Total | 2 | | |

| Question | 24 | | |
|----------|------|--|--|
| Part | Mark | Answer | Further Information |
| | 1 | Explanations that show 26 must be subtracted from 390, e.g.: | Do not accept 364 without a correct explanation. |
| | | 26 × 14 = (26 × 15) - 26 | Do not accept an answer that only carries out the long |
| | | or | multiplication 26 × 14 with no reference to 26 × 15 = 390. |
| | | 390 – 26 | |
| | | The answer of 364 is not necessary. | |
| Total | 1 | | |

| Question | 25 | | | | | |
|----------|------|------|--------|-------|---------------|---|
| Part | Mark | | | Answe | er | Further Information |
| | 1 | 0.57 | 3 5 | 0.65 | <u>2</u> 3 | All 4 answers must be in the correct order for 1 mark. |
| | | | | | | Accept alternative indications, e.g. decimals: 0.57 0.6 0.65 0.67 |
| | | | | | | Condone 0.66() for $\frac{2}{3}$. |
| Total | 1 | | | | | , |

| Question | 26 | | |
|----------|------|------------|---|
| Part | Mark | Answer | Further Information |
| | 2 | 6, 6 and 9 | Award 1 mark for three numbers with a mode of 6 or 3 numbers that total 21. |
| Total | 2 | | |

| Question | 27 | | |
|----------|------|---|--|
| Part | Mark | Answer | Further Information |
| | 1 | No and shows a calculation demonstrating that the two fractions are equivalent, e.g. | Do not accept an incorrect calculation, for example $\frac{3}{4} \times 2 = \frac{6}{8}$ |
| Total | 1 | | |

| Question | 28 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 3.7 | |
| Total | 1 | | |

| Question | 29 | | |
|----------|------|-------------------------------|-------------------------|
| Part | Mark | Answer | Further Information |
| | 1 | $1\frac{3}{5}$ or 1.6 (pizza) | Condone $\frac{8}{5}$. |
| Total | 1 | | |

| Question | 30 | | |
|----------|------|--------|--|
| Part | Mark | Answer | Further Information |
| | 1 | | Accept slight inaccuracies in the drawing provided the intention is clear. |
| Total | 1 | | |

Stage 6 Paper 2 Mark scheme

| Question | 1 | | |
|----------|------|-----------------------|--|
| Part | Mark | Answer | Further Information |
| | 1 | 60 or 90 or 120, etc. | Answer must be clearly identified. Accept the same correct number greater than 50 that is written at the end of both sequences. |
| Total | 1 | | |

| Question | 2 | | |
|----------|------|---------------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 30 or 31 (cm) | |
| Total | 1 | | |

| Question | 3 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 25 | |
| Total | 1 | | |

| Question | 4 | | |
|----------|------|-------------------------|--|
| Part | Mark | Answer | Further Information |
| | 1 | 20% 1/4 | All lines must be correct for the award of the mark. |
| | | $\frac{1}{5}$ | |
| | | 30% $\frac{35}{100}$ | |
| | | 35% $\frac{3}{10}$ | |
| Total | 1 | | |

| Question | 5 | | |
|----------|------|-------------------|---|
| Part | Mark | Answer | Further Information |
| | 2 | 3000, 3100, 13100 | Award 1 mark for any 2 correct answers. |
| Total | 2 | | |

| Question | 6 | | |
|----------|------|---|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 15 cm ² (20 cm ²) 25 cm ² 30 cm ² 35 cm ² | |
| Total | 1 | | |

| Question | 7 | | | | |
|----------|------|---------------|---------------|------------------|------------------------------|
| Part | Mark | | Answ | er | Further Information |
| (a) | 1 | | Less than 0.6 | Greater than 0.6 | Award 1 mark for both ticks. |
| | | <u>1</u> | ✓ | | |
| | | $\frac{4}{7}$ | ✓ | | |
| | | 8 13 | | ✓ | |
| (b) | 1 | 5.375 | | | |
| Total | 2 | | | | , |

| Question | 8 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | | |
| Total | 1 | | |

| Question | 9 | | |
|----------|------|---------|---------------------|
| Part | Mark | Answer | Further Information |
| (a) | 1 | (3, -3) | |
| (b) | 1 | 20 (cm) | |
| Total | 2 | | |

| Question | 10 | | |
|----------|------|--------|---|
| Part | Mark | Answer | Further Information |
| | 1 | 3500 | Accept any answer in the range 3000–4000. |
| | | | Accept answers on the diagram. |
| Total | 1 | | |

| Question | 11 | | |
|----------|------|------------------------|-------------------------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 30 and 80 80 and 30 | Pairs can be given in either order. |
| Total | 1 | | |

| Question | 12 | | |
|----------|------|---|---|
| Part | Mark | Answer | Further Information |
| | 1 | 6 • 4 - 2.9 = 3 • 5 | All digits must be correct for the award of the mark. |
| Total | 1 | | |

| Question | 13 | | |
|----------|------|--------|--|
| Part | Mark | Answer | Further Information |
| | 1 | | Line must pass through these two points. |
| | | | Accept lines that measure 66–70 mm. |
| | | | |
| | | | |
| Total | 1 | | |

| Question | 14 | | |
|----------|------|---------------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | Prime numbers | Accept prime. |
| Total | 1 | | |

| Question | 15 | | |
|----------|------|--|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 9 and 7 or 7 and 9 or 21 and 3 or 63 and 1 | |
| Total | 1 | | |

| Question | 16 | | |
|----------|------|---|---|
| Part | Mark | Answer | Further Information |
| | 2 | $\left(\begin{array}{c c} 9 \\ \hline 12 \end{array}\right)$ $\left(\begin{array}{c c} 6 \\ \hline 12 \end{array}\right)$ | Award 2 marks for all 3 pairs ringed. |
| | | 3 8 1 | Award 1 mark for 2 pairs. |
| | | $\left \begin{array}{c} \frac{3}{4} \\ \end{array}\right \left \begin{array}{c} \frac{8}{20} \\ \end{array}\right $ | Accept any clear indication of answers. |
| | | $ \begin{array}{c cccc} 2 & \hline 3 & 12 \\ \hline 10 & 40 \end{array} $ | |
| Total | 2 | | |

| Question | 17 | | |
|----------|------|-----------------|--------------------------------|
| Part | Mark | Answer | Further Information |
| | 1 | $10\frac{1}{2}$ | Do not accept $9\frac{3}{2}$. |
| | | or | |
| | | 10.5 | |
| Total | 1 | | |

| Question | 18 | | |
|----------|------|---------------------|---|
| Part | Mark | Answer | Further Information |
| (a) | 1 | -150 (°C) | Accept between -145 (°C) and -155 (°C). Do not accept 150. |
| (b) | 1 | Mercury and Jupiter | Either order |
| Total | 2 | | |

| Question | 19 | | |
|----------|------|--------|---|
| Part | Mark | Answer | Further Information |
| | 1 | = | Both parts must be correct for the award of the mark. |
| Total | 1 | | |

| Question | 20 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| (a) | 1 | 18 | |
| (b) | 1 | 16 | |
| Total | 2 | | |

| Question | 21 | | |
|----------|------|------------------------|---|
| Part | Mark | Answer | Further Information |
| (a) | 1 | Trapezium or trapezoid | The name must be given. Accept recognisable misspellings. Do not accept quadrilateral. |
| (b) | 1 | Rhombus | The name must be given. Accept recognisable misspellings. Do not accept square or quadrilateral or diamond. |
| Total | 2 | | 1 . |

| Question | 22 | | |
|----------|------|--|--|
| Part | Mark | Answer | Further Information |
| (a) | 1 | Bar drawn to represent 18 birds between 3 pm and 4 pm | Condone slight inaccuracies provided intention is clear. |
| (b) | 1 | Yes and explanation equivalent to: Because there are 12 birds between 11 am and 12 pm and 24 between 1 pm and 2 pm. The second bar is twice as high. | Do not award the mark if no explanation is given. Do not accept explanation that just repeats information given in the question, e.g. it is double. |
| Total | 2 | | |

| Question | 23 | | |
|----------|------|-------------------|--|
| Part | Mark | Answer | Further Information |
| (a) | 1 | | The number of 'knots' is 3, 4, 5, starting at the top of the 'string'. |
| (b) | 1 | 601 in answer box | |
| Total | 2 | | |

| Question | 24 | | |
|----------|------|------------|---|
| Part | Mark | Answer | Further Information |
| (a) | 1 | 5 (pieces) | Do not allow 5.7 or $5\frac{1}{2}$ etc. |
| (b) | 1 | 25 (cm) | Allow 0.25 m. Allow a follow-through mark if 200 – 35 × (a) = (b) where (a) is a whole number, provided their answer to (b) is less than 35. |
| Total | 2 | | |

| Question | 25 | | |
|----------|------|--------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | 75 | |
| Total | 1 | | |

| Question | 26 | | |
|----------|------|------------------------|--------------------------------------|
| Part | Mark | Answer | Further Information |
| | 1 | Square (based) pyramid | Do not accept pyramid. |
| | | | Accept any recognisable misspelling. |
| Total | 1 | | 1 |

| Question | 27 | | |
|----------|------|-----------------|--|
| Part | Mark | Answer | Further Information |
| | 2 | 10.48 (seconds) | Award 1 mark for evidence of a complete correct method, e.g. 43.7 – 33.22 43.7 – 9.87 – 12.05 – 11.3 |
| Total | 2 | | |

| Question | 28 | | |
|----------|------|---------|---------------------|
| Part | Mark | Answer | Further Information |
| | 1 | B and C | |
| Total | 1 | | |

| Question | 29 | | |
|----------|------|--|--|
| Part | Mark | Answer | Further Information |
| | 1 | and an explanation that cylinder A contains more than 250 ml of liquid but cylinder B has less than 250 ml of liquid | Do not award a mark for 'no' without an explanation. Accept explanations that correctly evaluate the amount of liquid in each cylinder, e.g. Cylinder A contains more than 250 ml and cylinder B contains approximately 225 ml. Do not accept an explanation that states the amounts are equal or an explanation that states that |
| | | | A has more than B without evaluating the amounts. |
| Total | 1 | | |

Stage 6 Paper 3 Mark scheme

| Question | Mark | Answer | Further information |
|----------|------|-----------------------|---------------------|
| 1 | 1 | 0.6 | |
| 2 | 1 | 5 | Accept 10 r 5. |
| 3 | 1 | 5.2 | |
| 4 | 1 | 9 (edges) | |
| 5 | 1 | 09:30 | |
| 6 | 1 | 750 (m <i>l</i>) | |
| 7 | 1 | 620 | |
| 8 | 1 | 3.5 | |
| 9 | 1 | 1200 | |
| 10 | 1 | 2211 | |
| 11 | 1 | 11 | Do not accept −11. |
| 12 | 1 | 2.88 | |
| 13 | 1 | 4.8 | |
| 14 | 1 | 50° 90° 130° (170°) | |
| 15 | 1 | 7 or 26 | |
| 16 | 1 | (\$)2.50 | |
| 17 | 1 | 27 (months) | |
| 18 | 1 | 77 (cm ²) | |
| 19 | 1 | (1, -4) | |
| 20 | 1 | 35 | |

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