# Cambridge Primary Progression Test
## Mathematics mark scheme
Stage 4

**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.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<br>......1850...... m<br>etc. |
| If the question states the unit that the answer should be given in, e.g. 'Give your answer in metres' | 1.85<br>1 m 85 cm | 185; 1850<br>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<br><br>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.<br>30 cents; 30 c<br>$0.30; $0-30; $00:30 | 30 or 0.30 without a unit<br><br>$30; 0.30 cents<br><br>Ambiguous answers, e.g.<br>$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.<br>$......0.30......;<br>$......0-30......;<br>$......00:30...... | $......30......<br><br>Ambiguous answers, e.g.<br>$......30 cents......;<br>$......0.30 cents......<br>**unless** units on the answer line have been deleted, e.g.<br>$......30 cents...... |
| If cents is shown on the answer line | ......30......cents | ......0.30......cents<br><br>Ambiguous answers, e.g.<br>......$30 ......cents;<br>......$0.30 ......cents<br>**unless** units on the answer line have been deleted, e.g.<br>......$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<br><br>Any correct conversion with appropriate units, e.g. 2.5 hours; 150 mins<br>**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, i.e. 18 minutes, of an hour rather than 30 minutes)<br><br>02:30 (as this is a 24-hour clock time, not a time interval)<br><br>2.5; 150 |

**Time**

The table below gives guidance for answers involving time.

The table shows acceptable and unacceptable versions of the answer 07:30.

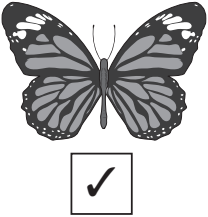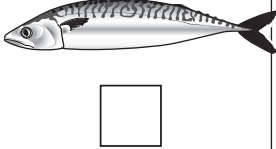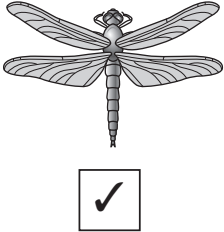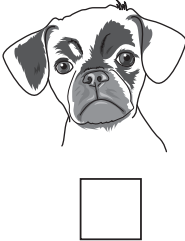| | Accept | Do not accept |
|---|---|---|
| If the answer is required in 24-hour format | Any unambiguous indication of correct answer in numbers, words or a combination of the two, e.g.<br><br>07:30 with any or no separator in place of the colon, e.g. 07 30; 07,30; 07-30; 0730 | 7:30<br>7:30 am<br>7 h 30 m<br>7:3<br>730<br>7.30 pm<br>073<br>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.<br><br>7:30 am with any separator in place of the colon, e.g. 7 30 am; 7.30 am; 7-30 am<br><br>7.30 in the morning<br><br>Half past seven (o'clock) in the morning<br><br>Accept am or a.m. | Absence of am or pm<br>1930 am<br>7 h 30 m<br>7:3<br>730<br>7.30 pm |

**Negative numbers**

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

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

**Stage 4  Paper 1  Mark scheme**

| Question | 1 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 7204 | |
| **Total** | **1** | | |

| Question | 2 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 |  | |
| **Total** | **1** | | |

| Question | 3 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 550 | Accept any number between 540 and 560. |
| **Total** | **1** | | |

| Question | 4 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 |  | Both lines are required, with no additional lines, for the award of the mark. |
| **Total** | **1** | | |

| Question | 5 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 200 | |
| **Total** | **1** | | |

| Question | 6 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 107 | |
| **Total** | **1** | | |

| Question | 7 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 | <table><tr><th>Direction</th><th>Distance</th></tr><tr><td>South</td><td>1 square</td></tr><tr><td>West</td><td>3 (squares)</td></tr><tr><td>South</td><td>3 (squares)</td></tr><tr><td>East</td><td>2 (squares)</td></tr><tr><td>South</td><td>1 (square)</td></tr></table> | Award 1 mark for each **column** that is correct **or** for 3 correct additional rows. |
| **Total** | **2** | | |

| Question | 8 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | $\frac{1}{2}$ or $\frac{5}{10}$ **and** 0.5 | |
| **Total** | **1** | | |

| Question | 9 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| **(a)** | 1 | 59 | |
| **(b)** | 1 | Subtract 8 | Accept an equivalent statement. |
| **Total** | **2** | | |

| Question | 10 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | Any 3 rectangles shaded | |
| **Total** | **1** | | |

| Question | 11 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 | Shape ____ Area | Award 1 mark for any 2 correct lines. |
| **Total** | **2** | | |

| Question | 12 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 |  | Note that 1 and 5 are interchangeable. |
| **Total** | **1** | | |

| Question | 13 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 |  | All 5 boxes must be correct for 2 marks.
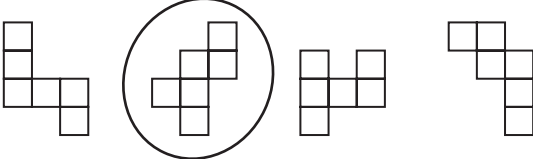
Accept 3 or 4 correct boxes for 1 mark. |
| **Total** | **2** | | |

| Question | 14 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 | <table><tr><td></td><td>Cycle to school</td><td>Do not cycle to school</td></tr><tr><td>Boys</td><td>9</td><td>9</td></tr><tr><td>Not boys</td><td>0</td><td>11</td></tr></table> | All 4 numbers must be in the correct section of the diagram to get 2 marks.

For 1 mark, 2 or 3 of the numbers should be in the correct place.

Accept numbers positioned anywhere within the correct section. |
| **Total** | **2** | | |

| Question | 15 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 |  | |
| **Total** | **1** | | |

| Question | 16 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | $\dfrac{\boxed{2}}{\boxed{4}} = \boxed{0}.\boxed{5}$ <br> **or** <br> $\dfrac{\boxed{2}}{\boxed{5}} = \boxed{0}.\boxed{4}$ | |
| **Total** | **1** | | |

| Question | 17 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 5 (metres and) 40 (centimetres) | Do not accept 540 (centimetres) or 5.4 (metres). |
| **Total** | **1** | | |

| Question | 18 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | Rajiv <br> Ahmed <br> Chen | |
| **Total** | **1** | | |

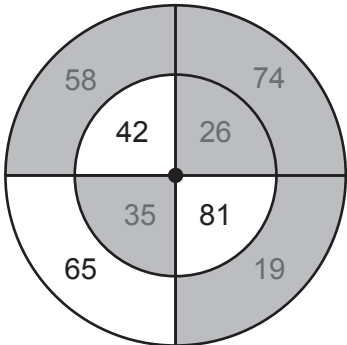| Question | 19 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 | $\boxed{4}\ \boxed{2}\ \boxed{1} - \boxed{1}\ \boxed{8}\ \boxed{7} = 234$ | Award 2 marks for all 4 digits correct. <br><br> Award 1 mark for correctly placing 7 in the units box. |
| **Total** | **2** | | |
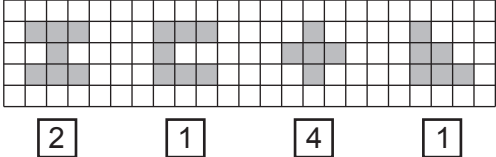
**Stage 4 Paper 2 Mark scheme**

| Question | 1 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| **(a)** | 1 | <table><tr><td>**Colour**</td><td>**Tally**</td><td>**Frequency**</td></tr><tr><td>Pink</td><td></td><td>6</td></tr><tr><td>Blue</td><td>卌 Ⅲ</td><td></td></tr><tr><td>Red</td><td></td><td>4</td></tr><tr><td>Green</td><td></td><td></td></tr></table> | All three correct for the mark.<br><br>Do not accept ⅠⅠⅠⅠⅠ for 卌 |
| **(b)** | 1 |  | Both bars for red and green drawn correctly to gain the mark.<br><br>Follow-through from an incorrect red frequency in **(a)**. |
| **Total** | **2** | | |

| Question | 2 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 2370  ☐ <  2730<br><br>3006  ☐ <  3100<br><br>4321  ☐ >  4312 | |
| **Total** | **1** | | |

| Question | 3 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 |  2  1  4  1 | Award 2 marks for all 4 answers correct.<br><br>Award 1 mark for 2 or 3 answers correct. |
| **Total** | **2** | | |

| Question | 4 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | C **and** E in either order | |
| **Total** | **1** | | |

| Question | 5 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | | |
| **Total** | **1** | | |

Circle values: 58, 74, 42, 26, 35, 81, 65, 19

| Question | 6 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 | | All 3 answers must be correct for 2 marks.<br><br>Award 1 mark for any 2 correct answers. |
| **Total** | **2** | | |

| IN | OUT |
|---|---|
| 17 | 34 |
| 26 | 52 |
| 370 | 740 |
| 600 | 1200 |

| Question | 7 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 602 – 99 ☐<br><br>905 – 396 ☐<br><br>704 – 297 ☐<br><br>806 – 198 ✓ | |
| **Total** | **1** | | |

| Question | 8 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | $\frac{5}{\boxed{10}}$ **and** $\frac{\boxed{4}}{8}$ | Both correct for the mark. |
| **Total** | **1** | | |

| Question | 9 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 15 (cm²) | |
| **Total** | **1** | | |

| Question | 10 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| (a) | 1 | $\frac{2}{3}$ | Accept equivalent fractions. |
| (b) | 1 | $\frac{2}{5}$ | Accept equivalent fractons. |
| **Total** | **2** | | |

| Question | 11 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 6217 | Accept answer written in the boxes. |
| **Total** | **1** | | |

| Question | 12 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| **(a)** | 1 | 12th | Accept<br>12<br>12 February<br>or equivalent |
| **(b)** | 1 | 25th | Accept<br>25<br>25 January<br>or equivalent |
| **Total** | **2** | | |

| Question | 13 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 8 0 × 4 = 3 2 0<br>**or**<br>4 0 × 8 = 3 2 0 | |
| **Total** | **1** | | |

| Question | 14 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 |  | |
| **Total** | **1** | | |

| Question | 15 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | 90 (centimetres) | |
| **Total** | **1** | | |

| Question | 16 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 |  | Accept any 3 correct lines for 1 mark. |
| **Total** | **2** | | |

| Question | 17 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 1 | –90 | |
| **Total** | **1** | | |

| Question | 18 | | |
|---|---|---|---|
| **Part** | **Mark** | **Answer** | **Further Information** |
| | 2 | <table><tr><td>**Student**</td><td>**Example or cross (✗)**</td></tr><tr><td>Jamila</td><td>✗</td></tr><tr><td>Aiko</td><td>Any correct example of 3 even numbers that add to give 20, e.g. 2 + 4 + 14 = 20</td></tr><tr><td>Manjit</td><td>Any correct example of 2 odd numbers and 1 even number that add to give 20, e.g. 1 + 3 + 16 = 20</td></tr><tr><td>Blessy</td><td>✗</td></tr></table> | Award 1 mark for two or three correct rows.<br><br>If all rows are crossed award 0 marks. |
| **Total** | **2** | | |
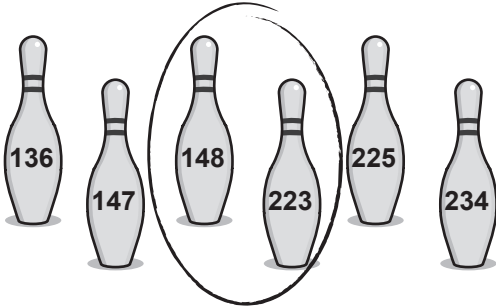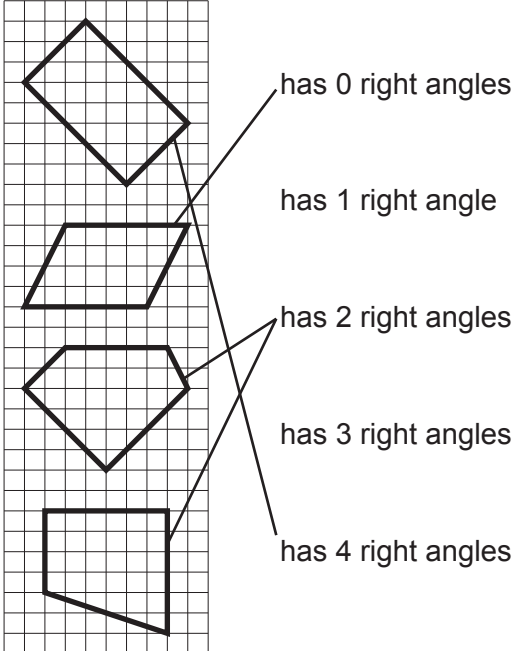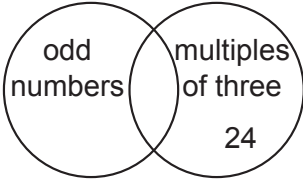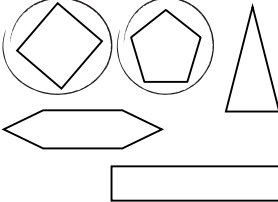
**Stage 4 Paper 3 Mark scheme**

| Question | Mark | Answer | Further Information |
|---|---|---|---|
| 1 | 1 | 32 | |
| 2 | 1 | 748 (cents) | |
| 3 | 1 | 1350 | |
| 4 | 1 | 350 | |
| 5 | 1 | $3\frac{1}{4}$ | |
| 6 | 1 | 1000 (metres) | |
| 7 | 1 | –6 (°C) | Do not accept 6−. |
| 8 | 1 | 14   26   34   (36) | |
| 9 | 1 | 250 (pages) | |
| 10 | 1 |  | |
| 11 | 1 | 6 | |
| 12 | 1 | 45(°) | |
| 13 | 1 | 7 | |
| 14 | 1 | 326 (stickers) | |
| 15 | 1 |  | |
| 16 | 1 | 166 | |
| 17 | 1 | 450 (m*l*) | Accept answers between 440 and 460 m*l*. |
| 18 | 1 | China (Australia) United States France | |
| 19 | 1 | 9 (cm) | |
| 20 | 1 | 11.09 am | |