## Spring mark scheme

## Year 6 - Reasoning \& problem solving

## General marking principles

- Answers should be single values in their simplest form unless the mark scheme says otherwise
- Accept reversed digits provided intention is clear e.g. a reversed 2 must clearly show the characteristics of a 2 rather than a 5
- Do not award the mark if more than one answer is given
- For numbers with four or more digits, accept answers with a comma positioned incorrectly or without a comma. Do not accept a decimal point or an apostrophe.


| Question | Answer | Marks | Notes and guidance |
| :---: | :---: | :---: | :---: |
| 8 | Indicates 4.71 and 4.68 | 1 | Award any clear indication. Both numbers needed. Do not award mark if an incorrect answer has been indicated. |
|  | 4.65 | 1 |  |
| 9 |  | 2 | Award 1 mark for each correct answer. |
| 10 | Indicates Tommy and gives a valid reason e.g. <br> - Alex has walked 8.5 km and Tommy has walked 9 km <br> - $\frac{9}{10}=90 \%$ and is greater than $85 \%$ <br> - $15 \%$ is more than $10 \%$ which is $\frac{1}{10}$ | 1 | Do not award the mark if no reason, or incomplete reason, is given. |
| 11 | 3 | 2 | Award 1 mark for recognising the total number of children who come by bus or cycle is 9 |
| 12 | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ | 2 | Award 1 mark for fully correct method with no more than one arithmetic error <br> OR <br> one correct value seen OR <br> correct method seen but values interchanged. |


| Question | Answer | Marks | Notes and guidance |
| :---: | :--- | :---: | :--- |
| 13 | 0.75 <br> 0.17 <br> $17 \%$ | 3 | Award 1 mark for each <br> correct answer. |
| 14 | 16 | 1 |  |
| 15 | 16 | 2 | Award 1 mark for fully <br> correct method with no <br> more than one arithmetic <br> error. |
| 16 | 375 | Chooses $=$ and gives a valid <br> reason e.g. <br> $60 \%$ of $£ 30=£ 18$ and <br> $30 \%$ of $£ 60=£ 18$ <br> $-\frac{60}{100} \times 30=\frac{30}{100} \times 60$ | Award 1 mark for fully <br> correct method with no <br> more than one arithmetic <br> error. |
| 17 | 11 | 2 | Do not award mark if no <br> reason, or incomplete <br> reason, is given. |
| 18 | 11 | Award 1 mark for fully <br> correct method with no <br> more than one arithmetic <br> error. |  |
| 19 | 6.35 | 2 | Award 1 mark for fully <br> correct method with no <br> more than one arithmetic <br> error. |
| 20 | 45 | Award 1 mark for fully <br> correct method with no <br> more than one arithmetic <br> error. |  |
| 1 |  |  |  |

Total : 35 marks

