# Junior Lyceum Entrance Examination into Form I - 2006 Mathematics Marking Scheme 

| Question | Requirements | Mark | Additional Guidance |
| :---: | :---: | :---: | :---: |
| 1 a) <br> b) <br> c) <br> d) | $\begin{array}{\|l\|} \hline 5044 \\ 300 \\ \text { Eight thousand three hundred and nineteen } \\ 8300 \end{array}$ | $\begin{array}{\|l\|l} 1 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | o.e. Do not accept Hundred <br> Accept answer in words |
| 2 a) <br> b) i) <br> ii) | $\begin{aligned} & \frac{8}{12} \text { or } \frac{2}{3} \\ & \frac{7}{12} \end{aligned}$ <br> Valid attempt to subtract using equivalent fractions $1 \frac{1}{12}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | Accept $\frac{13}{12}$ o.e. |
| 3 a) <br> b) i) <br> ii) | 4.7 written as largest first $4 \cdot 7,4 \cdot 07,0.74,0 \cdot 47$ $\square$ $26$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | All four in correct order <br> Accept drawing of $13^{\text {th }}$ pattern with 26 squares. <br> c.a.o. |
| $4 \text { a) }$ <br> b) <br> c) | $\begin{aligned} & \mathrm{V}=\mathrm{L} \times \mathrm{B} \times \mathrm{H} \text { seen or implied } \\ & 27000 \\ & 1+13 \text { or } 3+11 \text { or } 5+9 \text { or } 7+7 \quad \text { or vice-versa } \\ & 5 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | both must be correct |
| 5 a) <br> b) <br> c) <br> d) | $\begin{aligned} & \div \\ & \div \\ & + \\ & \times \end{aligned}$ | $\left\lvert\, \begin{aligned} & 1 \\ & 1 \end{aligned}\right.$ |  |
| 6 a) i) <br> ii) <br> b) | 22 <br> Valid attempt to find length of side 9 Correct drawing | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |  |
| $\begin{gathered} 7 \text { a) i) } \\ \text { ii) } \\ \text { b) } \end{gathered}$ | $14 \cdot 3$ <br> $10 \cdot 9$ <br> Valid attempt to find the length of the bristles 34 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | Do not accept 3.4 cm |
| $\begin{array}{r} \hline 8 \text { a) } \\ \text { b) } \end{array}$ | 45 <br> Adding 2.5 to Mariella's speed seen or implied Valid attempt to find distance seen or implied 285 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | f.t. for incorrect 45 in a) |
| 9 a) <br> b) i) <br> ii) | ```60 40 Valid attempt to find Daphne's amount 6``` | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | f.t. for incorrect 40 in b) i) |
| $10 \mathrm{i})$ <br> ii) | Attempt to divide 500 by 27 18 seen or implied 19 14 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |  |


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| 11 | $\begin{aligned} & \hline \text { a) } \\ & \text { b) } \\ & \text { c) } \end{aligned}$ | $4,7,10$ <br> Bar graph correctly drawn $\frac{9}{30}$ seen or implied, $\frac{3}{10}$ | $\begin{aligned} & \hline 2 \\ & 2 \\ & 1,1 \\ & 1,1 \end{aligned}$ | 7 1 or 2 correct answers score 1 mark, <br> $\int 3$ correct answers score 2 marks |
| 12 | $\begin{array}{r} \left.\hline \begin{array}{l} \text { a) } \\ \text { b) } \end{array}\right) \\ \text { i) } \\ \text { ii) } \\ \text { c) i) } \\ \text { ii) } \end{array}$ | $\begin{array}{\|l} \hline 65 \\ \mathrm{~B} \text { or } 60^{\circ}\left( \pm 2^{\circ}\right) \\ \text { A, D } \\ \text { Acute } \\ 180 \\ \text { scalene } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | c.a.o. |
| 13 | $\begin{array}{ll} \text { a) } & \text { i) } \\ \text { ii) } \\ \text { b) } \end{array}$ | North East or NE <br> North or N, West or W <br> description giving correct distances and directions | $\begin{aligned} & 1 \\ & 1,1 \\ & 3 \end{aligned}$ | -1 eeoo $\begin{gathered}\text { (for SE distance is } 6.3 \mathrm{~km} \\ \pm 0.3 \mathrm{~km} \text { ) }\end{gathered}$ |
| 14 | a) <br> b) i) <br> ii) <br> iii) | ```Any valid attempt to divide }8.75\mathrm{ by 7, 1.25 7.5 Any valid attempt, } 1.25``` | $\begin{aligned} & \hline 1 \\ & 1 \\ & 1 \\ & 1,1 \\ & 1,1 \\ & \hline \end{aligned}$ |  |
| 15 | a) <br> b) | Adding to find the total number of children Dividing by 4 <br> 31 <br> Valid attempt to find the number of boys in at least one of the buses <br> 24, 18 <br> bus 1 | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |  |
| 16 |  | Adding 2:30 seen or implied Adding 0:30 seen or implied 5:15 p.m. <br> Subtracting 5:30 seen or implied Subtracting 0:50 seen or implied 07:50 | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | Accept also 17:15 or 5:15 <br> Accept also 7:50 a.m. or 07:50 a.m. |
| 17 | $\begin{array}{lll} \hline \begin{array}{ll} \hline \text { a) } & \\ \text { b) } & \text { i) } \\ & \text { ii) } \\ \text { c) } & \text { i) } \\ & \\ & \text { ii) } \end{array} \\ \hline \end{array}$ | 4 <br> Horizontal line of symmetry correctly drawn Line AD seen Valid attempt to draw a circle outside the shape Correctly drawn circle touching at least 4 vertices 4 | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | $\begin{gathered} \pm 0.2 \mathrm{~cm} \\ \\ \pm 0.2 \mathrm{~cm} \end{gathered}$ |
| 18 |  | Adding weights of cups to tray ( $1000 \mathrm{~g}+450 \mathrm{~g}$ ) 1450 g seen or implied <br> Subtracting to find weight of bottles of lemonade 2250 g seen or implied Dividing by 3 seen or implied 750 | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | Accept any other valid method |
| 19 | $\begin{aligned} & \text { a) i) } \\ & \text { ii) } \\ & \text { iii) } \\ & \text { b) } \end{aligned}$ | Valid attempt to multiply area of advert A by 25 c <br> 8.75 <br> 8.00 <br> B <br> Valid attempt to arrive at a solution <br> Correct length and width | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ \hline \end{array}$ | Accept Lm8.00 <br> Area must be greater than $20 \mathrm{~cm}^{2}$ and less than $32 \mathrm{~cm}^{2}$ |
| 20 | a) <br> b) | Lm1.10 - Lm1. 00 seen or implied $85 c+10 c$ seen or implied 95c <br> Lm1.10-Lm0.50 seen or implied Result in (a) +60 c seen or implied Lm1. 55 | $\begin{array}{\|l\|l} \hline 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array}$ | Accept any other valid method <br> Accept any other valid method <br> f.t. for incorrect 95 c in (a) |

Legend to Marking Scheme: c.a.o. correct answer only
f.t. follow through
o.e. or equivalent
-1 eeoo -1 for each error or omission

## Other guidelines:

1. No mark in the marking scheme is sub-divisible.
2. Even if no working is shown, a correct answer scores full marks.
3. Incorrect answers - even though nearly correct - score no marks.
4. Incorrect working or statement following a correct answer is ignored.
5. An answer or working that is crossed out and not replaced is marked as if it was not crossed out. If the answer or working is replaced then the crossed out answer or working should not be considered in your marking.
6. If the child copies the answer from the working area to the answer area incorrectly, then award the marks without penalising.
7. Misread loses only the final accuracy mark but f.t. can be allowed on subsequent parts. The method marks can still be earned provided that the part question is not oversimplified.

Markers are reminded to jot down any remarks about the PAPER and the children's performance in particular questions. These remarks are to be included in the report each marker has to submit at the end of the marking exercise.
(A comments' sheet is supplied in order to help you compile this report.)

