## Junior Lyceum Entrance Examination into Form I - 2003 <br> Mathematics Marking Scheme

| Question | Requirements | Mark | Additional Guidance |
| :---: | :---: | :---: | :---: |
| 1 a | 6751 | 1 |  |
| b | 6.15 | 1 |  |
| c | 1200 | 1 |  |
| d | 100 | 1 |  |
| 2 a | 42, 49 or 56 | 1 |  |
| b | 1,3, 9, 29, 87 or 261 | 1 |  |
| c | Any correct answer (e.g. 53, 59, 61, 67, 71, 73 ...) | 1 |  |
| d | Any correct answer (e.g. 16, 36, 64...) | 1 |  |
| 3 a | B | 1 |  |
| b | C | 1 |  |
| c | $180^{\circ}$ | 1 |  |
| d | D | 1 |  |
| 4 a | Any valid attempt to convert to a common unit | 1 |  |
|  | $0.04 \mathrm{~m}, 380 \mathrm{~mm}, 39 \mathrm{~cm}$ (ALL three correct) | 1 | o.e. |
| b | Any valid attempt to convert to a common unit | 1 |  |
|  | $0.25 \mathrm{~kg}, 25 \mathrm{~g}, 0.02 \mathrm{~kg}$ (ALL three correct) | 1 | o.e. |
| 5 a | Any valid method, 54 | 1,1 |  |
| b | $3 \times 3 \times 3$ seen or implied, 27 | 1,1 |  |
| 6 | Attempt to read temperatures from graph | 1 |  |
|  | Attempt to add | 1 |  |
|  | Attempt to divide by 7 | 1 |  |
|  |  | 1 |  |
| 7 a | Valid attempt to find time difference, 9 | 1,1 |  |
| b | Valid attempt to find time difference, 2 h 10 min | 1,1 |  |
| 8 | $24 \times 17$ seen or implied | 1 |  |
|  | 408 | 1 |  |
|  | Subtracting from 523 | 1 |  |
|  |  | 1 | f.t. |
| 9 a | $\frac{1}{5}$ | 1 | c.a.o. |
| b | 20\% | 1 | f.t. |
| c | 80\% | 1 | f.t. |
| d |  |  | c.a.o. f.t. |
| 10 a | Any valid method | 1 |  |
|  | $2 \frac{1}{4}, 1 \frac{3}{4}$ <br> (BOTH correct in any order) | 1 |  |
| b | Any valid method | 1 |  |
|  | $3 \frac{1}{4}, 1 \frac{3}{4}$ <br> (BOTH correct in any order) | 1 |  |


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| $11 \mathrm{a}$ <br> b | Attempt to use repeated subtraction method Intermediate working, 21 17 | $\begin{aligned} & 1 \\ & 3,1 \\ & 1 \end{aligned}$ | f.t. |
| $12 \mathrm{a}$ b <br> c | $\begin{aligned} & 60 \\ & \text { Any valid method } \\ & 18 \text { boys, } 12 \text { girls } \\ & \text { Any valid method, } 9 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1,1 \\ & 1,1 \end{aligned}$ | f.t. |
| 13 a i. <br> ii. <br> b i. <br> ii. <br> iii. | $\begin{aligned} & \hline 6.3 \\ & 63 \\ & \text { less than } 90^{\circ} \\ & 50^{\circ} \\ & \text { Any valid method, } 40^{\circ} \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1,1 \end{aligned}$ | $\begin{aligned} & \pm 0.1 \mathrm{~cm} \\ & \pm 1 \mathrm{~mm} \\ & \\ & \pm 2^{\circ} \\ & \text { f.t. } \end{aligned}$ |
| $\begin{array}{cc} 14 \mathrm{a} & \text { i. } \\ & \\ & \text { ii. } \\ \mathrm{b} & \\ \mathrm{c} & \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 30 \\ 36 \\ 6 \text { seen or implied, } 24 \\ \text { Valid attempt to find breadth, } 4 \end{array}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1,1 \\ & 1,1 \\ & 1,1 \end{aligned}$ |  |
| $\begin{array}{r} 15 \mathrm{a} \\ \mathrm{~b} \\ \mathrm{c} \end{array}$ | 17, 21 <br> Valid attempt to find the pattern, 37 Any valid attempt, 11 | $\begin{aligned} & 1,1 \\ & 1,1 \\ & 1,1 \end{aligned}$ |  |
| $16 \mathrm{a}$ <br> b <br> c | Any valid reason <br> Division by 2 seen or implied, 5.7 $180^{\circ}, 2$ | $\begin{aligned} & 2 \\ & 1,1 \\ & 1,1 \end{aligned}$ | Do not accept "... because it is a parallelogram." |
| 17 | Pizza: Lm37.50 <br> Pasta: Lm27.50 <br> Soft Drink: Lm11.25 <br> Ice Cream: Lm12.00 <br> Addition seen or implied, Lm 88.25  | $\begin{aligned} & \hline 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1, \\ & 1,1 \end{aligned}$ | f.t |
| 18 a <br> b | Converting to a common unit seen or implied 6.611 <br> Subtracting from 9.45 l <br> 2.84 <br> Any valid method, 1.89 | $\begin{aligned} & \hline 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1,1 \end{aligned}$ | o.e. o.e. c.a.o. f.t. |
| 19 a i. <br> ii. <br> b | 70 <br> Any valid method, 210 <br> 1 h 30 min seen or implied <br> Adding 1:30 to 8:35 <br> 10:05 | $\begin{aligned} & 1 \\ & 1,1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |  |
| $20 \mathrm{a}$ <br> b | Any valid method 163 <br> Because 163 is a prime number | $\left\lvert\, \begin{aligned} & 3 \\ & 1 \\ & 2 \end{aligned}\right.$ | Award 3, 2, or 1 according to working shown. |

Legend to Marking Scheme: c.a.o. correct answer only
f.t. follow through
o.e. or equivalent

## 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.
