# Junior Lyceum Entrance Resit Examination into Form I - 2010
# Mathematics Marking Scheme

| No. | Requirements | Mark | Additional Guidance |
|---|---|---|---|
| 1 | 6004 | 1 | |
| 3 | 0.5 | 1 | |
| 5 | $\frac{2}{7}$ | 1 | |
| 7 | Any valid number. | 1 | |
| 9 | 5 | 1 | |

| No. | Requirements | Mark | Additional Guidance |
|---|---|---|---|
| 2 | 3402 | 1 | |
| 4 | Monday | 1 | |
| 6 | 25 | 1 | |
| 8 | 70 | 1 | |
| 10 | $\frac{1}{8}$ | 1 | |

| Question | Requirements | Mark | Additional Guidance |
|---|---|---|---|
| 11 a) i. | 13.2 | 1 | |
| ii. | 9.4 | 1 | |
| b) | Valid attempt to find the length of the nib. | 1 | e.g. by subtracting ii from i |
| | 3.8 | 1 | |
| 12 a) | One line of symmetry correctly drawn. | 1 | |
| | Second line of symmetry correctly drawn. | 1 | |
| b) | Correct drawing of reflected image. | 1 | |
| c) | D | 1 | |
| 13 a) | Valid attempt to work out the weight of one brick. | 1 | e.g. by dividing 17.2 by 8 |
| | 2.15 | 1 | |
| b) | valid attempt to work the weight of 5 bricks. | 1 | e.g. by multiplying 2.15 by 5 |
| | 10.75 | 1 | f.t. for incorrect 2.15 |
| 14 a) | 768 seen/implied | 1 | |
| | 384 | 1 | |
| b) | 200 seen/implied | 1 | |
| | 300 | 1 | |
| 15 a) | + | 1 | |
| b) | × | 1 | |
| c) | – | 1 | |
| d) | ÷ | 1 | |
| 16 | Multiplies 5.6 by 2. | 1 | |
| | Subtracts result from 37. | 1 | |
| | Divides result by 2. | 1 | f.t. for incorrect subtraction |
| | 12.9 | 1 | f.t. for incorrect division |
| 16 | Divides 37 by 2. | | |
| | 18.5 | | |
| | Subtracts 5.6 from result. | | f.t. for incorrect 18.5 |
| | 12.9 | | |
| 17 a) | $\frac{24}{32}, \frac{18}{24}$ | 1 | |
| b) | $\frac{3}{4}$ | 1 | |
| c) | Valid attempt to find the number. | 1 | e.g. divides by 3 and multiplies by 4. |
| | 48 | 1 | |

| Question | Requirements | Mark | Additional Guidance |
|---|---|---|---|
| 18 a) | Valid attempt to work amount of water. | 1 | e.g. adds amounts and subtracts from 11.75 |
| | 1.75 | 1 | |
| b) | Valid method to find average. | 1 | e.g. divides 11.75 by 5 |
| | 2.35 | 1 | |
| 19 | 437 seen | 1 | Accept any other valid method. |
| | Attempt to divide 437 by 23 | 1 | |
| | Valid intermediate work | 1 | |
| | 19 | 1 | |
| 20 a) i. | $\frac{1}{48}$ | 1 | |
| ii. | 36 | 1 | |
| iii. | 81 | 1 | |
| iv. | 7.03 pm | 1 | Award mark if pm is not included |
| b) | Smallest quantity identified | 1 | |
| | 2005 g, 2500 g, 2.505 kg, 20.5 kg | 1 | |
| 21 a) | 1.5, North (or N); 5, North East (or NE) | 2 | –1 (e.e.o.o.) |
| b) | 5, South West (or SW); 1.5, South (or S); 4, East (or E) | 4 | –1 (e.e.o.o.) |
| 22 a) | Valid attempt to find number of text messages. | 1 | e.g. adds text messages and subtracts from 96 |
| | 14 | 1 | |
| b) | bar graph correctly completed | 1 | f.t. for incorrect 14 |
| c) | 3 | 1 | |
| d) | Valid attempt to find percentage. | 1 | e.g. expresses number of messages received on Saturday as fraction of total (1/4) and converts to percentage. |
| | 25 | 1 | |
| 23 a) i. | 75 (±2°) | 1 | |
| ii. | Obtuse angle correctly marked and labelled. | 1 | |
| iii. | 4 | 1 | |
| b) | 180° seen or implied | 1 | |
| | Valid attempt to find M. | 1 | e.g. subtracts 134° from 180°. |
| | 46 | 1 | |
| 24 | Subtracts 2.50 from 27 | 1 | Accept any other valid method. |
| | 24.50 | 1 | |
| | Subtracts €3.50 from result | 1 | f.t. for incorrect 24.50 |
| | 21 | 1 | |
| | Valid attempt to find the number of kilometres. | 1 | e.g. divides 21 by 2 and adds the first kilometre covered. |
| | 11.5 | 1 | |
| 25 a) | 18 | 1 | |
| b) i. | One rectangle correctly drawn. | 1 | |
| | Second rectangle correctly drawn. | 1 | e.g. $6 \times 3$, $9 \times 2$ |
| ii. | 18 | 1 | Accept decimal/fraction solutions |
| | 22 | 1 | |
| iii. | "Different perimeters but equal area." | 1 | Accept "different perimeters". |

| Question | Requirements | Mark | Additional Guidance |
|---|---|---|---|
| 26 a) | Valid method to find George's pay. | 1 | e.g. multiplies 58 by 6 |
| | 348 | 1 | |
| | Valid method to find Brigitte's pay. | 1 | e.g. multiplies 42 by 9 |
| | 378 | 1 | |
| b) i. | Brigitte | 1 | |
| ii. | 30 | 1 | f.t. for incorrect 348 or/and 378 |
| 27 a) | $\frac{12}{60}$ | 1 | |
| | $\frac{1}{5}$ | 1 | |
| b) | Adds 1h 22 min to 49 min seen/implied | 1 | Accept other valid methods. |
| | Converts answer to hours and minutes | 1 | |
| | Adds result to 8:15 | 1 | |
| | 10:26 | 1 | |
| 28 | Shows understanding of the problem. | 1 | |
| | Develops and applies a suitable strategy to arrive at a solution. | 3 | e.g. divides 36 by 6 and multiplies by 4 and 10. |
| | 24 | 1 | |
| | 60 | 1 | |

**Legend to Marking Scheme:**

| | |
|---|---|
| **e.e.o.o** | each error or omission |
| **c.a.o.** | correct answer only |
| **f.t.** | follow through |