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## Maths Level 2 Mark Scheme Set 3 - Sample

| Task 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Question | Process | Marks Awarded | Answer | Mark |
| 1 | Calculates complete room or rectangles within <br> Finds answer <br> Calculates and finds bath area OR another rectangle <br> Calculates area to be tiled <br> Finds answer <br> Finds number of tiles in 1 $\mathrm{m}^{2}$ <br> Calculates number of tiles required <br> Finds number of tiles required <br> Concludes <br> Checks answer |  | $2.5 \times 3.5$ OR $2.5 \times 1.5$ <br> 8.75 OR 3.75 <br> $1 \times 2.5=2.5$ OR $1 \times 1=1$ <br> answer a - answer c OR answer a + answer c <br> (NOTE: all 3 methods are included in marks $a, b$ and $c$ ) <br> $6.25 \mathrm{~m}^{2}$ <br> $4(2 \times 2)$ <br> answer exanswer f <br> 25 <br> Yes, 3 packs of tiles will be enough <br> Correctly checks an answer(a,c,d,f,g) by inverse method, estimation or other suitable method |  |


| Task 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Question | Process | Marks Awarded | Answer | Mark |
| 2 | Calculates proportion | 1 R | $\begin{aligned} & 7 \div 1.5 \text { OR } 29 \div 6.95 \text { OR } \\ & \text { TO FIND } 1 \mathrm{~m}^{2}: 6.96 \div 1.5 \text { OR } 29 \div 7 \end{aligned}$ | k |
|  | Finds answer | 1 A | $\begin{aligned} & 4.67(2 \mathrm{dp}) \text { OR } 4.17(2 \mathrm{dp}) \text { OR } \\ & 4.64(2 \mathrm{dp}) \text { OR } 4.14(2 d p) \end{aligned}$ | I |
|  | Makes comparison | $1 \mathrm{R} / \mathrm{A}$ | $4.67 \times 6.95=£ 32.46$ (compared with £29) OR $4.17 \times 1.5=6.26(2 \mathrm{dp}$, area covered by Supastik for £29) OR Supastik costs 4.64 per $\mathrm{m}^{2}$ OR Moreflaw costs 4.14 per $\mathrm{m}^{2}$ | m |
|  | Concludes | 1 ln | Moreflaw is the best value for money. (note: the capacities of the products are irrelevant) | n |


| Task 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Question | Process | Marks Awarded | Answer | Mark |
| 3 | Extracts data from graph | $\begin{array}{\|l} \hline 1 \mathrm{In} \\ \text { OR } \\ 2 \mathrm{In} \end{array}$ | Any 3 from 250, 238, 244, 236, 226 <br> All 5 of above. | a ab |
|  | Finds sum of data | $1 \mathrm{R} / \mathrm{A}$ | 1194 OR answer a added (all 5 pieces of data) | c |
|  | Divides | 1 R/A | answer $\mathrm{c} \div 5$ | d |
|  | Finds mean | 1 A | 238.8 | e |
|  | Converts | 1 R | $3 \times 60$ or 60+60+60 OR 180 seen | f |
|  | Finds time in minutes and seconds | 1 A | 3 mins 58.8 secs (accept 3' 59") | g |
|  | Compares times | 1 ln | Liam is third fastest | h |
|  | Calculates average speed | 1 R | $1500 \div 238.8$ (accept 239) | i |
|  | Finds average speed | 1 A | 6.3 m/s (1dp) Accept 6.28 | j |
|  | Concludes | 1 ln | Yes, he can qualify for the team. | k |
| 4 | Calculates no. of times of a top 3 finish | 1 R | $100 \div 12$ OR $7 \div 12$ OR 58/100 (as an approximation) | I |
|  | Finds answer | $1 \mathrm{R} / \mathrm{A}$ | $58 \div$ answer I OR 0.5833r OR 58.33\% OR 29/50 (approximation cancelled down) | m |
|  | Rounds answer | 2 ln | 7/12 (7 times top 3 finish) | n o |


| Task 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Question | Process | Marks Awarded | Answer | Mark |
| 5 | Converts weight <br> Calculates no. of tubes | 1 R/A | $\begin{aligned} & 5 \mathrm{~kg}=5000 \mathrm{~g} \text { OR } 100 \mathrm{~g}=0.1 \mathrm{~kg} \\ & 5000 \div 100 \text { OR } 5 \div 0.1 \end{aligned}$ | a |
|  |  | 1 R |  | b |
|  | Calculates no. of tubes <br> Finds answer | 1 A | $5000 \div 100 \text { OR } 5 \div 0.1$ <br> 50 tubes | C |
|  | Calculates no. of sweets in each tube | 1 R | $750 \div 50$ | d |
|  | Finds no. of sweets in each tube | 1 A | 15 | e |
|  | Uses formula | 1 R | $2.5 \times 2.5$ OR squared another figure squared with a correct answer | f |
|  | Finds r squared | 1 A | 6.25 | g |
|  |  | 1 R/A | answer fx 3.14 | h |
|  | Finds denominator | 1 A <br> 1 R/A | 19.625 | i |
|  |  |  | 13 x answer d | j |
|  | Finds numerator | 1 A | 195 | k |
|  | Calculates height | 1 R/A | answer $\mathrm{j} \div$ answer h | I |
|  | Find heigh | 1 A | 9.94 cm (2dp) | m |
|  | Calculates no. of tubes per length OR calculates total length OR total tube required | 1 R | $\begin{aligned} & 60(0.6 m) \div 9.94 \text { OR } 12 \times 0.6 \text { OR } 12 \times \\ & 60 \text { OR } 50 \times 9.94 \end{aligned}$ | n |
|  | Finds no. of tubes per length OR finds total length | 1 A | 6.04 (2dp) OR 6 tubes per length 7.2 m OR 720cm | 0 |
|  | Finds no. of tubes available and concludes | 1 ln | 72 AND yes, he has enough tubing. | p |

