| $\mathbf{1}$ | 3.51 | $\mathbf{2}$ | M1 for $3.509677 \ldots$ rounded or truncated to <br> 1 dp or more <br> or SC1 for 5.73 | 5.73 from $6.26-0.82 \div 1.55$ to 2 dps |
| :--- | :--- | :--- | :--- | :--- | :--- |


| 2 | (a) | Gold | Silver | Bronze | Total | 3 | B3 for all 5 entries correct; B2 for 3 or 4 entries correct; B1 for 2 entries correct | [Common with Foundation] <br> B0 just one entry correct |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 13 | 11 | 9 | 33 |  |  |  |
|  |  | 11 | 5 | 10 | 26 |  |  |  |
|  |  | 10 | 10 | 5 | 25 |  |  |  |
|  |  | 34 | 26 | 24 | 84 |  |  |  |
|  | (b) | 2h 8m 2s |  |  |  | 2 | B1 for 2 elements correct or for 2h 7m 62s |  |


| $\mathbf{3}$ | (a) | 47.52 | 1 |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (b) | 15.2 | 1 |  |  |


| 4 | (a) | 23 (after figs 234[0] seen) | 4 | B3 for 23.4[0] <br> Or B2 for figs 234[0] <br> Or M1 for complete method seen |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | (b) | $10^{9}$ | AND <br> B1 for answer > 2 sf correctly rounded <br> to 2sf |  |  |


| 5 | 464.8 in either A or B $4 \text { in C }$ $116.2 \text { in } D$ $16.6 \text { in } E$ | $\begin{gathered} 1 \\ 1 \\ \\ \text { 1(FT) } \\ \text { 1(FT) } \end{gathered}$ | SC3 if 16.6 correct but in wrong box or intermediate steps wrong or missing <br> For the next two marks no more than one of them can be ft <br> FT exact answer to their (non-integer) $464.8 \div 4$ <br> FT exact answer to their (non-integer) $116.2 \div 7$ <br> If 0 or 1 , allow $\mathbf{S C 2}$ for figs 166 seen | Exact answers may be fractions |
| :---: | :---: | :---: | :---: | :---: |


| $\mathbf{6}$ | (a) | 1315200 | 1 |  |  |
| :--- | :--- | :--- | :--- | :---: | :--- | :--- |
|  | (b) | 1315.2 | 1FT | FT their (a) $\div 1000$ |  |
|  | (c) | 0.411 | 2 | M1 for digits 411 seen |  |


| 7 | (a) | 26.5 | 3 | M2 for $\frac{15.9}{6} \times 10$ oe Or M1 for $\frac{15.9}{6}$ soi by 2.65 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (b) | 33 | 3 | B2 for $33.96 \ldots$ to 34 seen Or M1 for $\frac{90}{15.9} \times 6$ or $\frac{90}{\text { their } 2.65}$ |  |


| 8 | (a) | $2 \times 3^{2} \times 5$ oe | 2 | For 2 marks must be product M1 for at least two of 2, 3 and 5 found as factors |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (b) | 4:30 pm oe | 3 | nfww <br> M2 for $2 \times 3^{2} \times 5^{2}$ oe or 450 [minutes] identified as interval (eg by lists stopping) or for 4:30 [pm] oe appearing in a list of times for both bell and buzzer <br> Or M1 for lists of multiples of both 90 and 150 up to at least 450 condoning one error, FT in the lists or of times for bell and buzzer up to at least 16:30 oe, with one error (or to at least their first common time provided this is 2 pm or later) or M1 for $150=2 \times 3 \times 5^{2}$ oe soi (eg by correct factor tree) <br> If $\mathbf{0}$ scored then $\mathbf{S C 2}$ for $\mathbf{4 : 3 0}$ or 16:30 pm or other wrong time format Or SC1 for 900 [minutes] seen/used as interval or for midnight oe as answer | Condone 4.30 pm or 16.30 <br> Allow M2 for answer of 16:50 or for 450 s or 4 h 50 m seen/used as interval eg by answers of 1:50 pm |


| $\mathbf{9}$ | (a) <br> $\mathbf{a}$ | (i) | 6.75 or 6.7 or 6.8 | $\mathbf{1}$ |  |  |
| :--- | :---: | :---: | :--- | :---: | :--- | :--- |
|  |  | (ii) | 614.125 | $\mathbf{1}$ | Condone rot to 3sf or more |  |
|  | (b) | $2+3 \times(2+7)=29$ | $\mathbf{1}$ |  | ignore superfluous pairs of extra <br> brackets eg $2+(3 \times(2+7))=29$ <br> but 0 for extra single brackets or for <br> extra brackets giving wrong result eg <br> $(2+3) \times(2+7)=29$ |  |
|  | (c) | 231 | $\mathbf{2}$ | M1 for $3.85 \times 60$ or for 0.85 minutes $=$ <br> $51 s ~ s o i ~$ |  |  |

