| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 1 | (a) |  | 3.50 | 1 | B1 for 3.50 cao |
|  | (b) |  | 3.05 | 1 | B1 3.05 cao |
|  | (c) |  | 3510 | 1 | B1 for 3510 or 3510.00 |
| 2 | (a) |  | right angle marked | 1 | B1 for the right angle marked with square or R |
|  | (b) |  | acute angle marked | 1 | B1 for either (or both) of the acute angles marked |
|  | (c) |  | kite drawn | 1 | B1 for a kite drawn (accept square or rhombus or arrowhead) |
| 3 | (a) |  | circle drawn | 1 | B1 for a circle drawn within guidelines (see overlay) |
|  | (b) |  | diameter drawn | 1 | B1 for line through $C$ and touching circle at both ends |
| 4 | (a) | $5.85+4.90$ | 10.75 | 1 | B1 for 10.75 cao |
|  | (b) | $60.55 \div 8.65$ | 7 | 2 | M1 for $60.55 \div 8.65$ or $8.65 \times 7=60.55$ or for at least 4 repeated additions or subtractions of 8.65 <br> A1 for 7 cao |
|  | (c) | $8.65+(4.90+4.90)$ | 1.55 | 3 | M1 for $8.65+(4.90+4.90)$ |
|  |  | 20-18.45 |  |  | M1 (dep) for 20 - '18.45' |
|  |  |  |  |  | A1 for 1.55 cao <br> SC: award B1 for sight of 18.45 or 6.45 or 10.20 |
|  |  |  |  |  | award B2 for 155 |


| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 5 | (a) |  | 6 | 1 | B1 for 6 cao |
|  | (b) | IIII | diagram | 1 | B1 for correct diagram (4 vertical sticks and 8 horizontal sticks) |
|  | (c) |  | 12, 15 | 2 | B2 for 12 and 15 <br> (B1 for either 12 or 15 or ' 12 ' +3 |
|  | (d) |  | reason | 1 | B1 eg for '100 multiplied by 3' or ' $100 \times 3$ ' or ' $\times 3$ ' or $3 n$ (but not $3 n+$ a number) or 'keep adding 3 ' oe, as long as " 3 " is mentioned. |
| 6 |  |  | Bars at 8 and 5 | 2 | B1 for bar of height 8 (above orange) B1 for bar of height 5 (above green) |
|  | (b) |  | 6 | 1 | B1 for 6 cao |
|  | (c) |  | yellow | 1 | B1 ft for yellow or ft from their diagram |
|  | (d) | $6+10+8+5$ | 29 | 1 | B1 correct answer or ft by adding the heights of the columns on the graph |
| 7 | (i) <br> (ii) |  |  | 1 1 | B1 for cone or alternative spellings only that sound like "cone". <br> B1 for cylinder or alternative spellings only that sound like "cylinder". Accept circular based prism. |


| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 8 |  | $\frac{9}{12}$ | $\frac{3}{4}$ | 2 | B2 for $\frac{3}{4}$ cao (B1 for $\frac{9}{12}$ seen) |
|  | (b) |  | shading | 1 | B1 for 6 squares (only) shaded |
|  | (c) |  | 0.3 | 1 | B1 for 0.3 oe |
|  | (d) |  | $\frac{39}{100}$ | 1 | B1 for $\frac{39}{100}$ oe as a fraction |
| 9 | (a) <br> (b) |  | $\begin{gathered} \hline 6.4 \\ \text { Midpoint marked } \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | B1 for 6.2 - 6.6 inclusive; accept 62-66 with mm stated. <br> B1 for midpoint marked at 3 - 3.4 inclusive |
| 10 | (a) |  | 7, 4, 2, 1, 2 | 2 | M1 for at least one correct frequency or tally <br> A1 for 7, 4, 2, 1, 2 cao <br> ( B 2 for correct frequencies without the use of tallies) |
|  | (b) |  | 2 | 1 | B 1 for 2 or ft values in table NB: BO if the 7 is given with the 2 |
|  | (c) | $6-2=$ | 4 | 2 | M1 for identifying 6 and 2 , eg $6-2$, as long as 6 and 2 are not identified with any incorrect operation <br> A1 cao |


| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 11 | (a) <br> (b) | $6 \times 3+4$ $\begin{aligned} & 52-4=48 \\ & 48 \div 6= \end{aligned}$ | $22$ $8$ | 2 3 | M1 for $6 \times 3$ or for ' $6 \times 3$ ' +4 or 18 seen <br> A1 for 22 , accept 22.00 or 22.0 <br> M1 for $52-4$ or 48 seen <br> M1 (dep) for ' $52-4$ ' $\div 6$ or $48 \div 6$ <br> A1 for 8 cao <br> Alternative method: <br> M2 for a systematic attempt using $6 \times d+4$ at least twice with at least one $d$ greater than 5 with correct answers A1 for 8 cao |
| 12 | (a) <br> (b) <br> (c) <br> (d) |  | 33 180 110 marked 0.27 marked |  | B1 for 33 cao <br> B1 for 180 cao <br> B1 for 110 marked cao <br> B1 for 0.27 marked cao |
| 13 | (i) <br> (ii) <br> (iii) |  | $\begin{gathered} \hline 12 \\ 3 \\ 3 \text { or } 11 \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ | B1 for 12 cao <br> B1 for 3 cao <br> B1 for 3 and/or 11 cao |
| 14 | (a) <br> (b) |  | Shading <br> Shading | 1 1 | B1 for one square shaded to get one of <br> OR OR <br> B1 for one square shaded to get |


| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 15 |  | $\begin{aligned} & \frac{1}{6} \times 36=6 \\ & \frac{2}{9} \times 36=8 \\ & 36-(8+6) \end{aligned}$ | 22 | 3 | M1 for $\frac{1}{6} \times 36$ or $36 \div 6 ; \frac{2}{9} \times 36$ or $36 \div 9 \times 2$ or 8 seen or 14 seen or $\frac{1}{6}+\frac{2}{9}$ or $\frac{7}{18}$ oe or 6 seen as long as not with incorrect working. <br> M1 (dep) for $36-(8+6)$ ' or $36-"\left(\frac{2}{9}+\frac{1}{6}\right)$ " $\times 36$ or $\left(1-\frac{1}{6}+\frac{2}{9}\right) \times 36$ <br> A1 for 22 cao <br> SC B2 for $\frac{22}{36}$ oe fraction |
| 16 |  | 10/72×360=50 perch <br> $23 / 72 \times 360=115$ bream <br> 39/72×360=195 carp | 50, 115, 195 | 4 | M1 for evidence of method for at least one angle (could be implied by one correct angle on pie chart or in the table) A2 all three angles drawn $\pm 2^{\circ}$ tolerance, any order (A1 at least one angle correctly drawn $\pm 2^{\circ}$, or all three angles in the table) <br> B1 names of fish as labels (dep on at least one angle drawn correctly, and exactly three sectors; initials will do) NB: Ignore table if pie chart provides marks |
| 17 |  |  | 87.75 | 2 | M1 for $3 \times 4.5 \times 6.5$ seen or implied eg from answer of 87.7 or 87.8 or 88 (with no other working shown) <br> A1 for 87.75 cao |


| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 18 | (a) | $1.8 \times-8+32$ | 17.6 | 2 | M1 for $1.8 \times-8$ or -14.4 or $\frac{-72}{5}$ seen or $32-1.8 \times 8$ ' or $1.8 \times-8+32$ seen <br> A1 for 17.6 or $\frac{88}{5}$ or 17.60 oe |
|  | (b) | $\begin{aligned} & 68=1.8 C+32 \\ & 1.8 C=68-32 \\ & C=36 \div 1.8 \end{aligned}$ | 20 | 2 | M1 for $68-32$ or 36 or $68=1.8 \mathrm{C}+32$ seen; condone replacement of $C$ by another letter. <br> A1 for 20 cao <br> NB Trial and improvement score 0 or 2 |
| 19 |  |  | construction | 2 | M1 for a pair of arcs drawn from the same centre on 2 lines at same distance from meeting point; or a single arc crossing both lines; using an arc with a radius which is the length of the shorter line will imply an intersection with the end of that line. $( \pm 2 \mathrm{~mm})$ <br> A1 for bisector ( $\pm 2^{\circ}$ ) and correct arcs <br> SC: B1 for bisector $\left( \pm 2^{\circ}\right)$ with no arcs, or incorrect arcs if MO awarded. <br> Accept bisectors that are dashed or dotted. |
| 20 | (a) <br> (b) | $\begin{aligned} & 325 \times 1.68 \\ & 117 \div 1.5 \end{aligned}$ | $\begin{aligned} & 546 \\ & 78 \end{aligned}$ | $2$ $2$ | M1 for $325 \times 1.68$ seen or digits 546 A1 for 546 , accept 546.00, 546.0 <br> M1 for $117 \div 1.5$ seen or digits 78 A1 for 78, accept 78.00, 78.0 |


| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Question |  | Working | Answer | Mark | Notes |
| 21 | (a) <br> (b) <br> (c) |  | (65, 100), (80, 110) plotted <br> positive (correlation) <br> 105-110 | 1 <br> 1 <br> 2 | B1 for plotting both points (65, 100), (80, 110) correctly (tolerance one square); ignore any additional plots given. <br> B1 for positive (correlation) or length increases with height oe <br> M1 for a single line segment with positive gradient that could be used as a line of best fit or a vertical line from 76 <br> A1 for given answer in the range 105-110 |
| 22 | (a) <br> (b) |  | Correct shape <br> Reflection in line $x=0$ | $2$ $2$ | B2 for correct shape; any orientation. <br> (B1 for any two sides correct or all correct for scale factor other than 1 or 2 ), tolerance to within half square <br> B1 for reflection, reflect, reflected. <br> B1 for line $x=0$ or $y$-axis <br> NB: more than one transformation should be awarded 0 marks. |
| 23 | (a) <br> (b) <br> (c) <br> (d) | $\begin{aligned} & 5 \times 3 x-5 \times 2 \\ & 3 y \times y+3 y \times 4 \end{aligned}$ | $4 m$ $4 p q$ $15 x-10$ $3 y^{2}+12 y$ | $2$ | B1 for $4 m$ oe <br> B1 for $4 p q$ or $4 q p$ or $p 4 q$ oe <br> B1 for $15 x-10$ cao <br> M1 for $3 y \times y+3 y \times 4$ or $3 y^{2}+a$ or $3 y^{2}+a y$ or $b+12 y$ or $b^{2}+12 y$ where $a, b$ are integers, and can be zero A1 for $3 y^{2}+12 y$ or $3 x y^{2}+12 x y$ |

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|l|}{1380/2F} \\
\hline \multicolumn{2}{|r|}{Question} \& Working \& Answer \& Mark \& Notes \\
\hline 24 \& (a) \& \[
18 \div 6: 12 \div 6
\] \& \[
3: 2
\] \& 2 \& \begin{tabular}{l}
M1 for \(18: 12\) or \(12: 18\) or \(1.5: 1\) or 1:0.67 oe or correct ratio reversed eg 2:3 \\
A1 for \(3: 2\) or \(1: 0.6 \ldots\) [recurring]
\end{tabular} \\
\hline \& (b) \& \[
\begin{aligned}
\& 5+1=6 \\
\& 54 \div 6=9 \\
\& 5 \times 9
\end{aligned}
\] \& 45 \& 2 \& \begin{tabular}{l}
M1 for \(\frac{5}{5+1} \times 54\) or \(\frac{1}{5+1} \times 54\) or \(54 \div{ }^{\prime} 5+1\) ' or \(54 \times 5\) or 270 or \(9: 45\) \\
or 9 seen, as long as it is not associated with incorrect working. \\
A1 for 45 cao
\end{tabular} \\
\hline 25 \& \& \begin{tabular}{ll}
\(15 \times 3=45\) \& \(15 \times 3.5\) \\
\(25 \times 9=225\) \& \(25 \times 9.5\) \\
\(20 \times 15=300\) \& \(20 \times 15.5\) \\
\(12 \times 21=252\) \& \(12 \times 21.5\) \\
\(8 \times 27=216\) \& \(8 \times 27.5\) \\
\(1038 \div 80=\) \& \(1078 \div 80=\)
\end{tabular} \& 12.97-13.48 \& 4 \& \begin{tabular}{l}
M1 for fx consistently within interval including ends (allow 1 error) \\
M1 (dep) consistently using appropriate midpoints \\
M1 (dep on first M) for \(\Sigma f x \div \Sigma f\) \\
A1 for 12.97-13.48
\end{tabular} \\
\hline 26 \& \begin{tabular}{l}
(a) \\
(b)
\end{tabular} \& \[
t^{6+2}
\]
\[
m^{8-3}
\] \& \[
\begin{gathered}
t^{8} \\
m^{5}
\end{gathered}
\] \& \[
\begin{aligned}
\& 1 \\
\& 1
\end{aligned}
\] \& \begin{tabular}{l}
B1 for \(t^{8}\) or for \(t^{6+2}\) \\
B1 for \(m^{5}\) or for \(m^{8-3}\)
\end{tabular} \\
\hline 27 \& (a)

(b) \& $$
\begin{aligned}
& 4.6+3.85=8.45 \\
& 3.2^{2}-6.51=3.73 \\
& 8.45 \div 3.73=
\end{aligned}
$$ \& \[

2.26541555
\]

$$
2
$$ \& 2

1 \& | M1 for $\frac{169}{20}$ or $\frac{256}{25}$ or $\frac{373}{100}$ or 3.73 or 10.24 or 8.45 seen A1 for 2.265(41555); accept $\frac{845}{373}$ |
| :--- |
| B1 ft for 2 or follow through their answer to part (a) |
| NB: 2.0 gets BO | \\

\hline
\end{tabular}

| 1380/2F |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | estion | Working | Answer | Mark | Notes |
| 28 |  | $(0.5 \times 3.14 \ldots \times 8)+8$ | 20.56-20.58 | 3 | M2 for ( $0.5 \times \pi \times 8$ ) or $\pi \times 4$ or $(\pi \times 8+8)$ or $(0.5 \times \pi \times 8$ +8) oe <br> (M1 for $\pi \times 8$ or $2 \pi \times 4$; for a value 25.1-25.2 inclusive unless seen with incorrect working eg $\pi \mathrm{r}^{2}$ ) <br> A1 for 20.56 - 20.58 <br> (SC: B2 if MO scored for 12.56-12.58) |

