


| 13 | $2 x=180-78$ |  |  |  | [1] Using angles in a triangle rule |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $x=51^{\circ}$ |  |  |  | [1] |
| 14 | $1.73 \times 7=12.11$ |  |  |  | [1] Method to find their total height |
|  | $1.74 \times 8=13.92$ |  |  |  | [1] Method to find total height of all 8 |
|  | 1.81 m |  |  |  | [1] Method to find difference in total heights |
| 15 | $30+(15 \times 7)=€ 135$ |  |  |  | [1] |
|  | $0.6 \times 135=€ 81$ |  |  |  | [1] Method to find cost of car hire |
|  | $£ 1 \approx € 1.20$ |  |  |  | [1] Correctly finds conversion rate |
|  | $81 \div 1.20=£ 67.50$ |  |  |  | [1] Converts euros to pounds |
|  | £2.50 |  |  |  | [1] |
| 16 | $180 \div 0.8$ |  |  |  | [1] |
|  | €225 |  |  |  | [1] |
| 17 |  | Year 9 | Year 10 | Total | [1] For 84 and 62 <br> [1] For 181 and 159 <br> [1] For 355 |
|  | Boys | 62 | 97 | 159 |  |
|  | Girls | 112 | 84 | 196 |  |
|  | Total | 174 | 181 | 355 |  |
|  | $\frac{159}{355}$ |  |  |  | [1] |
| 18 | $\begin{gathered} 1 \text { part }=510 \div 3=170 \mathrm{~g} \\ 5 \times 170=850 \mathrm{~g} \end{gathered}$ |  |  |  | [1] Method to find amount of fudge |
|  | $(850 \times 0.9) \div 100=7.65$ |  |  |  | [1] |
|  | 7 |  |  |  | [1] |


| 19 | Median, 2018: $\frac{29+30}{2}=29.5 \mathrm{~kg}$ | [2] |
| :---: | :---: | :---: |
|  | $29.5 \times 2.20=64.9 \mathrm{lbs}$ | [1] Method to convert to lbs |
|  | $\frac{68-64.9}{64.9} \times 100$ | [1] Correct percentage change calculation |
|  | 4.78\% increase | [1] |
| 20 | $5 \times 3.14 \times 2^{2}$ | [1] Method to find volume of cylinder |
|  | $62.8 \mathrm{~cm}^{3}$ | [1] |
|  | $350 \div 62.8$ | [1] Method to divide mass by volume |
|  | $5.57 \mathrm{~g} / \mathrm{cm}^{3}$ | [1] |
| 21 | $12+10+122=144 \mathrm{mins}$ | [1] Method to find total time spent travelling |
|  | $144 \div 60=2.4$ hours | [1] Convert time to hours |
|  | $197 \div 2.4$ | [1] Divides distance by time |
|  | 82.08 mph | [1] |
| 22 | Offer 1: $(1.80 \times 0.9) \div 2=£ 0.81 / \mathrm{litre}$ | [1] |
|  | Offer 2: $(2.20 \times 0.5) \div(0.330 \times 4)=£ 0.83 /$ litre | [1] |
|  | Offer 3: $(0.6 \times 0.75) \div 0.5=£ 0.90 / \mathrm{litre}$ | [1] |
|  | Offer 1 is the best value for money | [1] |

