NO calculator work. You may need more space for your workings out

1. There are 180 students in year 7 .
$\frac{3}{5}$ of the students are boys.
$\frac{3}{4}$ of the boys like sport.
Work out how many of the boys don't like sport.
2. There are 2400 cars for hire in a rental agency.

Cars are either automatic or manual.
$\frac{1}{4}$ of the cars are automatic.
$\frac{5}{6}$ of the manual cars have 5 gears.
Work out how many cars in the rental agency are manual and have 5 gears
3. Mimi's digital camera has space for 400 photos.

She deletes $\frac{1}{5}$ of her photos.
$\frac{5}{8}$ of the photos Mimi has now are for her photography coursework.
Work out how many photos are not for her photography coursework.

|  | workings | or long winded way | $=$ | mark |
| :--- | :--- | :--- | ---: | :--- |
| Q1 boys | $\frac{3}{5} \times 180$ |  | 108 | 108 M1 |
| don't like sport | $\frac{1}{4} \times 108$ | $\frac{3}{4}$ of $108=81,108-81$ | 27 | M1 and A1 |
| Q2 manual | $\frac{3}{4} \times 2400$ | $\frac{1}{4} \times 2400=600,2400-600$ | 1800 | 600 or $1800 \mathrm{M1}$ |
| 5 gears | $\frac{5}{6} \times 1800$ |  | 1500 | M1 and A1 |
| Q3 keeps | $\frac{4}{5} \times 400$ | $\frac{1}{5} \times 400=80,400-80$ | 320 | 80 or 320 M 1 |
| not coursework | $\frac{3}{8} \times 320$ | $\frac{5}{8} \times 320=200,320-200$ | 120 | M1 and A1 |

