

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 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 M1
not coursework	$\frac{3}{8} \times 320$	$\frac{5}{8} \times 320 = 200, 320 - 200$	120	M1 and A1