a)

A delivery company has a total of 160 cars and vans.

the number of cars : the number of vans $= 3 : 7$

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{8}$ of the cars use electricity.
25% of the cars use diesel.
The rest of the cars use petrol.

Work out the number of cars that use petrol.
You must show all your working.

How many of each type of vehicle are there?	$160 \div (3 + 7) = 16$ $16 \times 3 = 48$ cars $16 \times 7 = 112$ vans
How many of the cars use electricity?	$\frac{1}{8}$ of $48 = 6$ cars use electricity
How many of the cars use diesel?	25% of $48 = 12$ cars use diesel
How many of the cars use petrol?	$48 - (6 + 12) = 48 - 18 = 30$ cars use petrol

b)

A delivery company has a total of 180 cars and vans.

the number of cars : the number of vans $= 2 : 7$

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{5}$ of the cars use electricity.
15% of the cars use diesel.
The rest of the cars use petrol.

Work out the number of cars that use petrol.
You must show all your working.

How many of each type of vehicle are there?	$180 \div (2 + 7) = 20$ $20 \times 2 = 40$ cars $20 \times 7 = 140$ vans
How many of the cars use electricity?	$\frac{1}{5}$ of $40 = 8$ cars use electricity
How many of the cars use diesel?	15% of $40 = 6$ cars use diesel
How many of the cars use petrol?	

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c)

A delivery company has a total of 300 cars and vans.

the number of cars : the number of vans $= 3 : 2$

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{4}$ of the cars use electricity.
35% of the cars use diesel.
The rest of the cars use petrol.

Work out the number of cars that use petrol.
You must show all your working.

How many of each type of vehicle are there?	$300 \div (3 + 2) = 60$ $60 \times 3 = 180$ cars $60 \times 2 = 120$ vans
How many of the cars use electricity?	
How many of the cars use diesel?	
How many of the cars use petrol?	

d)

A delivery company has a total of 120 cars and vans.

the number of cars : the number of vans $= 2 : 3$

Each car and each van uses electricity or diesel or petrol.

$\frac{1}{6}$ of the cars use electricity.
25% of the cars use diesel.
The rest of the cars use petrol.

Work out the number of cars that use petrol.
You must show all your working.

BACKWARD FADED MATHS