Mr and Mrs Shankara and their 3 children go on a train journey.

Mr Shankara pays for 2 adult tickets and 3 child tickets.
The price of an adult ticket is £8.40
The price of a child ticket is half the price of an adult ticket.

Mr Shankara pays for the tickets with 3 ten pound notes.

Work out how much change he should get.

Here are the instructions to work out the time, in minutes, needed to cook a chicken.

$$25 \text{ minutes for each } \frac{1}{2} \text{ kg}$$

then   add 15 minutes

Lawrence is going to cook a chicken.
The chicken has a weight of 2 kg.

Lawrence wants to finish cooking the chicken at 6 30 pm.

Work out the time he should start to cook the chicken.

Matthew has a job.
His normal hourly rate of pay is £10

His overtime hourly rate of pay is $1\frac{1}{2}$ times his normal hourly rate of pay.

Matthew is paid at the normal hourly rate for 7 hours work each day, Monday to Friday.
He does **not** work on Saturday or Sunday.

Here is a table showing the number of hours of overtime he worked each day this week.

	Mon	Tues	Wed	Thur	Fri
Overtime (hours)	3	2	0	1	3

Work out Matthew's total pay for this week.

A lift takes people to the top of a tower.
The lift stops only at the bottom of the tower and at the top of the tower.

The table below gives information about the times taken by the lift.

	Time taken
Waits at bottom of tower	1 minute
Goes up to top of tower	45 seconds
Waits at top of tower	1 minute
Goes down to bottom of tower	45 seconds

The lift can carry a maximum of 10 people.

Liz says that in 1 hour the lift can carry more than 200 people to the top of the tower.

Is Liz correct?
You must show how you get your answer.

Ben hires some buses to take 768 people to a football match.
Each bus can take 56 people.

Ben hires the least number of buses needed to take all 768 people.

Then 19 of the 768 people decide **not** to go to the football match.

Does Ben still need all the buses he has hired?
You must show how you get your answer.

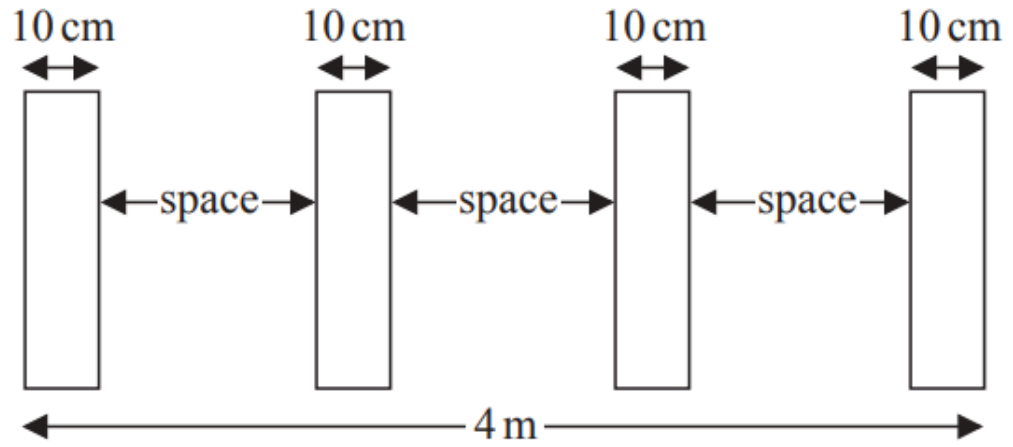| Best vans	Vans for hire
$\frac{1}{3}$ off normal price of £87 for each day	£44 for each day
	plus
No charge for the miles	15p for each extra mile over 250 miles

Scott wants to hire a van for 2 days.
He is going to drive 400 miles in the van.

Scott wants to pay the least possible money to hire the van.

Should Scott hire the van from Best vans or from Vans for hire?
You must show all your working.

Brian is making a fence.

The fence will be 4 m long.

Brian uses four posts.
Each post has a width of 10 cm.

Brian wants to have spaces of equal width between the posts.

Work out the width of each space.
You must show your working.

Two shops, Mega Bathrooms and Bathroom Mart, each have a sale.

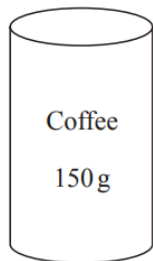| Mega Bathrooms	Bathroom Mart
Sale	Sale
60% off normal price **then** 15% off	$\frac{2}{3}$ off normal price

Sally wants to buy some bathroom units.
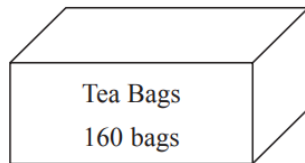The units have a normal price of £1500

Sally wants to buy the units as cheaply as possible.

Which shop should she buy the units from?
You must show all your working.

Adam owns a cafe.

Coffee 150 g

£4

Tea Bags 160 bags £4.50

There are 150 grams of coffee in each jar of coffee, costing £4
There are 160 tea bags in each box of tea bags, costing £4.50

Adam uses
    3 grams of coffee to make each cup of coffee
  and 1 tea bag to make each mug of tea.

Adam buys enough jars of coffee to make 300 cups of coffee.
He also buys enough boxes of tea bags to make 500 mugs of tea.

(a) Work out the total cost.

Adam also sells cakes in his cafe.

On Friday afternoon, Adam had **no** cakes to sell.

On Saturday morning, 6 trays of cakes were delivered to the cafe.
There were 30 cakes in each tray.

When the cafe closed on Saturday, 12 of these cakes had **not** been sold.

(b) Work out how many cakes were sold on Saturday.

300 passengers go on a coach trip.

Each coach takes 50 passengers.

Each passenger pays £25

The table shows the costs for the coach company.

	Cost for each coach
Pay for driver	£90
Fuel	70p per mile

Each coach travels 200 miles.

Work out the **total** profit the company makes from this trip.

Karl has twin sisters.

The sum of the ages of Karl and his twin sisters is 39

In 4 years' time the twins will be 18

How old will Karl be in 4 years' time?

In 2015, Han was paid £1350 per month.

In 2016, he

     had a 2% increase in his monthly pay

     worked 37.5 hours per week

     worked for 47 weeks.

Work out Han's average pay **per hour** for 2016

Here are two ways of having a car for one year.

Buy and sell	Rent
Buy it for £ 12 000	Normal Price: £ 195 per month
Sell it for £ 10 000 after one year	**Special Offer** 15% off

Which way is cheaper?
You **must** show your working.

Fay is planning a trip to a theme park for 1 adult and 2 children.

These are the costs for the trip.

Total cost of petrol	£23
Tickets to theme park	£33 each adult £24.50 each child
Meals	£15 each adult £10 each child

Fay has £200 to spend.
She pays all the costs.

How much money does she have left?

A shop sells jars of coffee.
Each jar of coffee costs £4

Michael has £23

(a) Work out the greatest number of jars of coffee Michael can buy.

....

In a sale on Wednesday, jars of coffee are sold at half price.

Michael thinks that he can now buy exactly twice the number of jars of coffee for £23

(b) Is Michael correct?
     You must give a reason for your answer.

208 bars of chocolate were sold from a shop.

$\dfrac{1}{4}$ of these bars of chocolate were large bars.

The rest of the bars of chocolate were small bars.

All the large bars of chocolate were sold for £1 each.
All the small bars of chocolate were sold for 60p each.

Work out the total amount of money for which the 208 bars of chocolate were sold.
Give your answer in pounds.

2.5 kg of onions and 2 kg of carrots cost a total of £2.36
3 kg of carrots cost £1.74

Stuart has £2
He wants to buy 4 kg of onions.

Does Stuart have enough money to buy 4 kg of onions?
You must show how you get your answer.

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.

Nimra buys a 3 kg box of sweets for £17.60

She puts the sweets into bags to sell.
Each bag contains 150 g of sweets.

Nimra fills as many bags as possible.
She will sell each bag for the same price.

Nimra wants to make a profit of at least 35%

Assuming she sells all the bags,
what is the lowest price Nimra should charge for each bag?

In November, Andre received a monthly salary of 2500 euros.

Of this he spent

      40% on his rent
      300 euros on leisure

The rest of Andre's monthly salary was spent on household bills and on food where

      the amount spent on household bills : the amount spent on food $= 3 : 7$

Work out how much of his November monthly salary Andre spent on food.