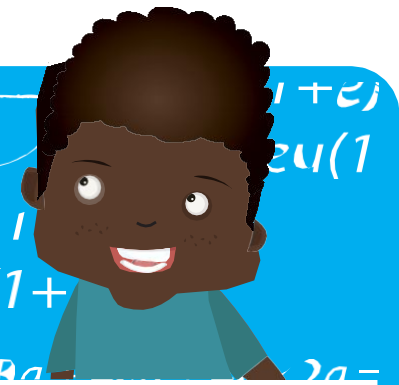


PROBLEM SOLVING



Brian is buying fruit for a picnic. He needs at least 100 pieces, but doesn't want more than 110.

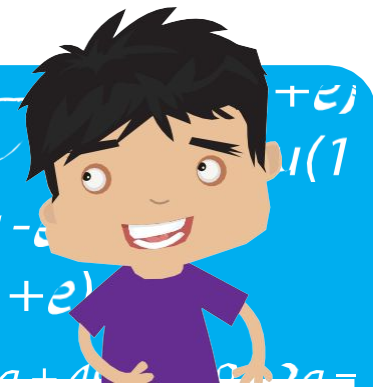
The fruit shop sells fruit in bags. Apples come in bags of 10, oranges come in bags of 8, passionfruit come in bags of 12 and pears come in bags of 6.

What combinations of fruit bags could Brian buy for the party?

List some possibilities.



PROBLEM SOLVING



Chen is playing a game at a carnival. He must pick three numbers out of a bag.

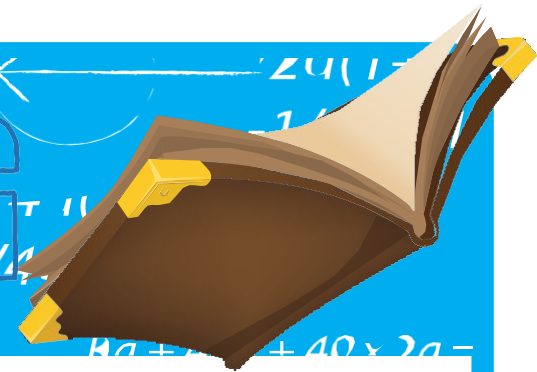
The numbers in the bag are: 21, 8, 16, 32, 65 and 14.

Chen will win a prize if the three numbers add up to a number less than 50; if the three numbers add up to a multiple of five; or if the three numbers add up to a number greater than 80.

List some winning combinations of numbers.



PROBLEM SOLVING



Open a book to any page and look at the first 20 words.
Write up a tally which shows the number of letters in each word.
Represent this information in three different ways.
Which of your three representations is the best choice for displaying your data? Why?
Write some questions about your data.



$$Ra + 40a + 4$$

$$y = ut + \frac{1}{2}at^2$$

PROBLEM SOLVING 1

Choose four digits between 1 and 9.

Create as many numbers involving decimals as you can, using these four digits.

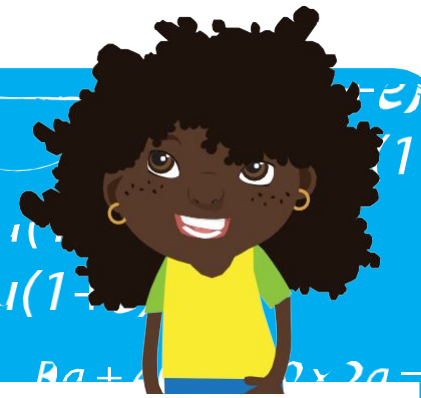
Write your numbers in ascending and descending order.

Place your numbers on a number line.

Draw a picture which represents each decimal.



PROBLEM SOLVING



Davina's family have just opened an Italian restaurant. They have enough space for 72 diners.

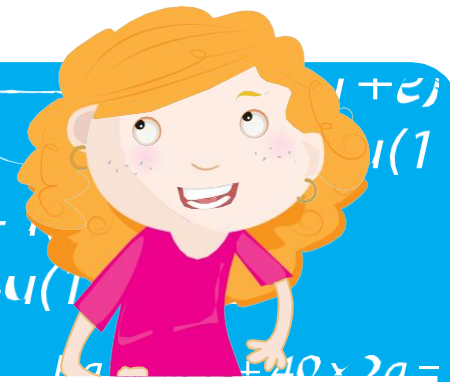
Draw two possible floor plans, showing two different ways of how the tables might be arranged.

The fewest amount of people per table is 2.

The greatest amount of people per table is 8.

There must be a variety of table sizes in the restaurant.

PROBLEM SOLVING



Petunia loves planting colourful flowers in her flower garden.

Today, she has 2 yellow flowers, 3 red flowers, 4 orange flowers and 1 pink flower.

She wants to plant them in a straight line along the front of her garden.

Draw some possible flower arrangements.

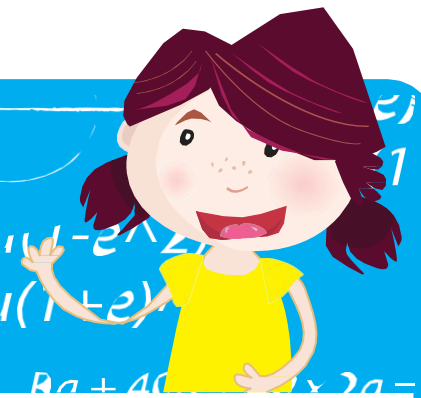
Is it possible to draw a line of flowers so that no two flowers of the same colour are together?



$$Ra + 40a + 4$$

$$y = ut + \frac{1}{2}at^2$$

PROBLEM SOLVING



Dominique's grade are going on a school outing. There are 160 students in the grade.

The students must be placed in small groups during the outing.

There must be no less than 4 and no more than 10 students in each group.

How many groups could there be? How many students would be in each group?

List some possibilities.

