Math Challenge Problems

1.) Maze 100

2.) Carrying Cards

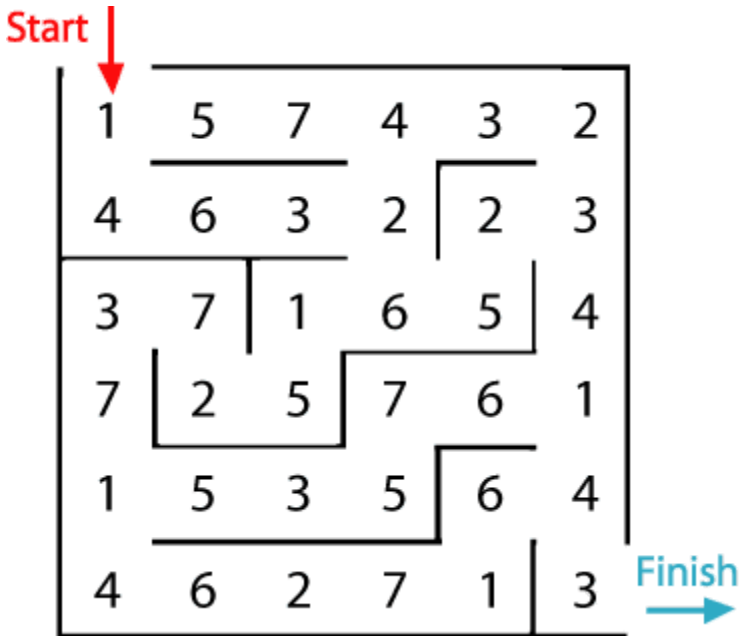
3.) Make 100

4.) Build It Up

Maze 100

In this maze there are numbers in each of the cells. You go through adding all the numbers that you pass. You may not go through any cell more than once.

Can you find a way through in which the numbers add to exactly 100?



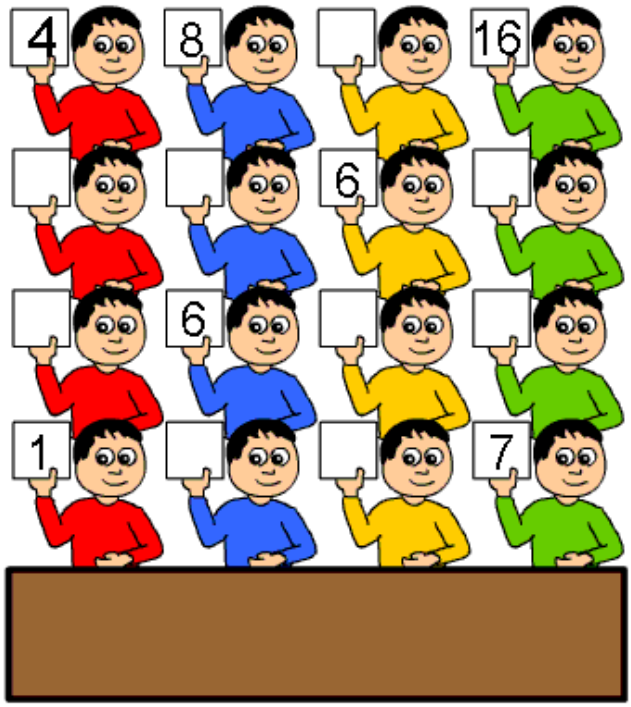
What is the lowest number you can make going through the maze?

What is the highest number you can make going through the maze? (Remember you may not go through any cell more than once.)

Carrying Cards

Name: _____

These sixteen children are standing in four lines of four, one behind the other. They are each holding a card with a number on it.



Each child in blue is holding a number which is four more than the child in the same row wearing red.

The children in yellow shirts each have a number which is double the number of the child in the same row wearing red.

Some of the numbers that the children in red, blue or yellow shirts are holding have got rubbed off. What should the numbers be?

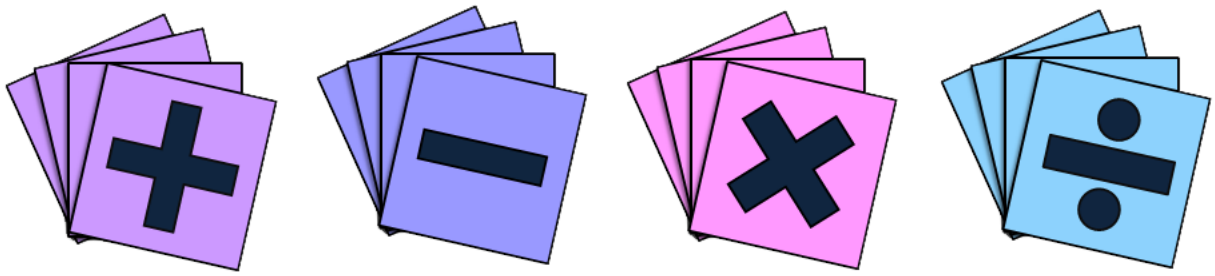
Can you work out how the numbers that the children in green are holding have been worked out? What are the two missing numbers?

If there was another row of four children standing behind the fourth row, what numbers would they be holding?

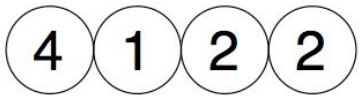
Make 100

Find at least one way to put in some operations signs (+, −, ×, ÷) to make these digits come to 100.

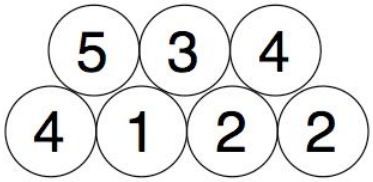
1 2 3 4 5 6 7 8 9 = 100



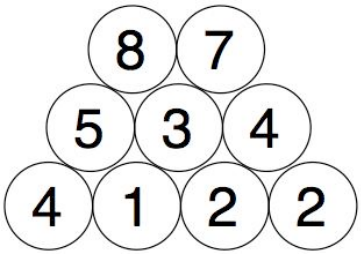
We start with any four numbers (not zero!):



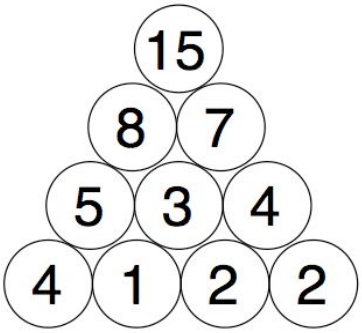
We then add them in pairs and place the total above each pair:



And we then add in pairs the new numbers:



We do the same with those two numbers to get our final number:



You need to find four starting numbers to place at the bottom so that when you get to the top you reach 15.

Try to find as many starting numbers as you can.

Think about good ways of doing this. You may want to use a system!