

## Years 1 and 2 Reasoning

### Jack and the beanstalk

Jack climbed the beanstalk.  
He always went upwards.



He first did it like this: left, right, left, right.

Find five other ways that Jack can climb the beanstalk.

### Card sharp

Take ten cards numbered 0 to 9.



1. Pick three cards with a total of 12.  
You can do it in 10 different ways.  
See if you can record them all.
2. Now pick four cards with a total of 12.  
How many different ways can you do it?
3. Can you pick five cards with a total of 12?

### Line of symmetry

You need:  
some squared paper,  
a red pen, a green pen and a blue pen.

Gopal had six squares: two red, two green, two blue.  
He put them in a line.  
The squares made a symmetrical pattern.

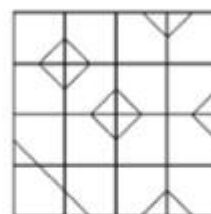
red	blue	green	green	blue	red
-----	------	-------	-------	------	-----

Arrange six squares in a line.  
Make two squares red, two green and two blue.  
Make the line of squares symmetrical.

How many different lines can you make like this?

### Odd one out

1. Here is a grid of 16 squares.  
One square is different from all the others.  
Mark it on the grid.



2. Now do this one.

