

Here are a few you can do at home.

Ben's numbers

Ben has written a list of different whole numbers.
The digits of each number add up to 5.
None of the digits is zero.

Here is one of Ben's numbers.

23

Ben has written all the numbers he can think of.
How many different numbers are there in his list?

Write all the numbers in order.

Spaceship



Some Tripods and Bipods flew from planet Zeno.
There were at least two of each of them.

Tripods have 3 legs.
Bipods have 2 legs.
There were 23 legs altogether.

How many Tripods were there?
How many Bipods?

Find two different answers.



Rows of coins



1. Take five coins: 1p, 2p, 5p, 10p, 20p.
Put them in a row using these clues.
The total of the first three coins is 27p.
The total of the last three coins is 31p.
The last coin is double the value of the first coin.

2. Take six coins: two 1p, two 2p and two 5p.
Put them in a row using these clues.
Between the two 1p coins there is one coin.
Between the two 2p coins there are two coins.
Between the two 5p coins there are three coins.

What if you take two 10p coins as well, and
between them are four coins?