

April Stillness Monthly Brain Teasers



Answers

Y3/Y4 - Card tricks

Systematic working helps to make sure that all possibilities have been considered.

Four different cards with a total of 20 are:

1, 4, 7, 8	2, 3, 7, 8	3, 4, 5, 8
1, 5, 6, 8	2, 4, 6, 8	3, 4, 6, 7
	2, 5, 6, 7	

Three different cards with a total of 16 are:

1, 7, 8	2, 6, 8	3, 5, 8	4, 5, 7
		3, 6, 7	

You could try other totals.

For example, four cards with a total of 18 are:

1, 2, 7, 8	2, 3, 6, 7	3, 4, 5, 6
1, 3, 6, 8	2, 4, 5, 7	
1, 4, 5, 8		
1, 4, 6, 7		

Explore the different totals that can be made with four cards. (It is possible to make any total from 10 to 26).

Y5/Y5 - Make five numbers

For example:

- 12, 39, 45, 60, 78
- 7, 42, 63, 98, 105
- 5, 23, 67, 89, 401

There are other solutions.