

Summer is fast approaching and Miss Spendalot is excited about booking her next holiday. The problem is, last Summer she put all her holiday money in a safe and she can't remember the code. Luckily she wrote down some clues but now needs your help to solve them. There are 3 locks in total, each with 4 digits. Use the clues below to crack the codes and so Miss Spendalot can book her holiday.

Lock 1

- ❖ The third digit doesn't change if you multiply it by any other number.
- ❖ The first digit is 3.5 times the last digit.
- ❖ The last digit is an even prime number.
- ❖ The difference between the last two numbers is two thirds of the difference between the first and second numbers.

Lock 2

- ❖ If the third number is n , the first number is $n-4$.
- ❖ The third number is 75% of 12.
- ❖ The second number is an odd square number and so is the fourth number, which is smaller.
- ❖ All the numbers add up to 24.

Lock 3

- ❖ The last number times the first number is a multiple of 10.
- ❖ The last number is the number of edges on a cube take away the number of vertices on a parallelogram.
- ❖ If the difference between the first and last number is d , the second number is $2d$.
- ❖ If the last number is x and the first number is y , the third number is $x - y$.

