

# Let's Crack the Code

## Part 2

Yesterday you found the first 3 digits needed to open the 5 digit padlock.

The numbers found are 3, 5 and 8.

### Challenge 4 –

Let's find the 4 digit to open the padlock.

$$\begin{matrix} \text{Gift} & \times & \text{Gift} & \times & \text{Gift} & = & 27 & 3 \times 3 \times 3 = 27 \end{matrix}$$

$$\begin{matrix} \text{Gift} & \times & \text{Popcorn} & \times & \text{Popcorn} & \times & \text{Popcorn} & = & 24 & 3 \times 2 \times 2 \times 2 = 24 \end{matrix}$$

$$\begin{matrix} \text{Gift} & \times & \text{Popcorn} & \times & \text{Ice Cream} & \times & \text{Ice Cream} & = & 150 & 3 \times 2 \times 5 \times 5 = 150 \end{matrix}$$

$$\begin{matrix} \text{Gift} & + & \text{Ice Cream} & - & \text{Popcorn} & = & 6 \\ 3 & + & 5 & - & 2 & = & 6 \end{matrix}$$

The 4<sup>th</sup> number to open the padlock is 6.

### Challenge 5 –

These birthday cards will provide you with your last digit.

Find the area of all of these birthday cards.



Areas in ascending order:  $187\text{ cm}^2$ ,  $195\text{ cm}^2$ ,  $204\text{ cm}^2$ ,  $208\text{ cm}^2$ ,  $210\text{ cm}^2$ ,  $252\text{ cm}^2$

The area in the 5<sup>th</sup> place ( $210\text{ cm}^2$ ) and the digit in the hundreds place is 2.

The last digit to open the padlock is **2**.

# Now you have 5 numbers Let's Crack the Code



6 5 8 2 3

You managed to open the padlock.

WELL DONE!

What's inside

<https://www.youtube.com/watch?v=FiXCxfWWwPo>