## Escape the Room <br> Clue for Digit 1

There are 9 rectangles (including squares) in this $2 \times 2$ grid.


How many rectangles (including squares) are there in this $3 \times 3$ grid?


Add together the digits of this answer to give you the first digit of the keypad code.

## Escape the Room <br> Clue for Digit 2

Discover the smallest square number that can be written using five different Roman numerals.

| Symbol | Value |
| :---: | :---: |
| I | 1 |
| V | 5 |
| X | 10 |
| L | 50 |
| C | 100 |
| D | 500 |
| M | 1000 |

Divide this number by 24 to discover the second digit of the keypad code.

## Escape the Room

## Clue for Digit 3

How many more squares need to be shaded in so that $\frac{3}{4}$ of the grid is shaded?


Add together the digits of this answer to give you the third digit of the keypad code.

## Escape the Room <br> Clue for Digit 4

Use the clues to calculate the mystery number.

- Rounded to the nearest ten, the number is 61460.
- The number is divisible by 4.
- The digit sum is even.

What is the number?

Add together the digits of the mystery number to give you the fourth digit of the keypad code.

## Escape the Room

Clue for Digit 5
Here is a line graph showing the length of a shadow measured over time.

A Line Graph to Show the Length of a Shadow Measured over Time


- At its shortest length, the shadow measured 40 cm .
- At its longest length, the shadow measured 240 cm .
- What was the length of the shadow at hour 7 ?

The tens digit of this answer will give you the fifth digit of the keypad code.

## Escape the Room <br> Clue for Digit 6

Work out the rule for each number sequence and find the next five numbers in each sequence.

| 1. | 1250 | 1350 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2. | 6750 | 5750 |  |  |  |  |  |
| 3. | 1810 | 1800 |  |  |  |  |  |

Which number is common to each of the number sequences?

Add together the digits of this answer to give you the sixth digit of the keypad code.

## Escape the Room Clue for Digit 7

Use the clues to calculate the mystery two-digit number that is less than 50.

- It is one more than a prime number.
- The sum of its digits is a square number.

Add together the digits of this answer to give you the seventh digit of the keypad code.

## Escape the Room <br> Clue for Digit 8

Use the clues to calculate the mystery five-digit number.

- The digits of the hundreds and ones total 12.
- It has two more ones than hundreds.
- It has one less ten thousand than ones.
- The digits of the thousands and hundreds total the same digit as the number of ten thousands.
- It has a digit sum of 22 .

The tens digit of this answer will give you the eighth digit of the keypad code.

## Escape the Room

Clue for Digit 9
Calculate the difference between these pairs of numbers.

| 1. | 23 | to | -13 |  |
| :---: | :---: | :---: | :---: | :--- |
| 2. | -16 | to | 27 |  |
| 3. | 26 | to | -12 |  |
| 4. | -11 | to | 31 |  |
| 5. | 21 | to | -24 |  |
| $\mathbf{6 .}$ | -8 | to | 35 |  |

Which answer appears twice?

Add together the digits of this answer to give you the ninth digit of the keypad code.

## Escape the Room <br> Clue for Digit 10

Find the missing digits in these calculations.
Which missing digit is common to both calculations?


| 7 | 0 |  | 6 |
| ---: | ---: | ---: | ---: |
| -3 |  | 5 | 2 |
| 3 | 1 | 0 |  |

This answer will give you the tenth digit of the keypad code.

