



# GCSE Maths

## Numbers

### Types of Numbers

### Simple Questions - Answers

1. **600** (hundreds place)
2. **Four hundred and eight thousand, one hundred and twenty**
3. **460**
4. **8,395 rounded to:**
  - Nearest **100** → **8,400**
  - Nearest **1,000** → **8,000**
5. **0.509**

### Medium Questions - Answers

6. **Multiplying and dividing by powers of 10:**
  - **$7.38 \times 1,000 \rightarrow 7,380$**
  - **$45,600 \div 100 \rightarrow 456$**
7.  **$5.4 \times 10^4$**
8. **0.0063**
9. **0.405, 0.45, 0.5, 0.54**
10. **3,000,000**

## Difficult Questions - Answers

### 11. Smallest and largest number rounding to 6,800 (nearest 100)

Smallest: 6,750

Largest: 6,849

### 12. Change in value from 9,832,450 to 9,802,450

Difference: 30,000

### 13. Which is larger, $4.2 \times 10^5$ or $3.8 \times 10^6$ ?

$$4.2 \times 10^5 = 420,000$$

$$3.8 \times 10^6 = 3,800,000$$

Answer:  $3.8 \times 10^6$  is larger

### 14. Convert 0.43 (0.434343...) to a fraction

$$\text{Let } x=0.434343\dots x = 0.434343\dots x=0.434343\dots$$

$$\text{Multiply by 100: } 100x=43.434343\dots$$

$$\text{Subtract: } 100x-x=43.434343\dots-0.434343\dots$$

$$99x=43$$

$$x=43/99$$

### 15. Finding A and B in 56A3B (divisible by 5 and 3)

Divisibility by 5: B must be 0 or 5

Divisibility by 3: Sum of digits must be a multiple of 3

$$\text{If } B = 0, \text{ then sum} = 5 + 6 + A + 3 + 0 = 14 + A$$

$$\text{If } B = 5, \text{ then sum} = 14 + A + 5 = 19 + A$$

Possible values:

$$\text{If } B = 0 \rightarrow A = 1 \text{ or } 4 \text{ or } 7$$

$$\text{If } B = 5 \rightarrow A = 2, 5, \text{ or } 8$$