


## Round Large Numbers to the Nearest 10, 100, or 1000 – iNA3

 Do all of iNA3 without a calculator!

### Reminder

For whole numbers we have:

Thousands	Hundreds	Tens	Units
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### Example

Round 876 543 to the nearest thousand.

### Solution

The figure in the thousands column is 6 and this is the **required figure**.

8 7 6 5 4 3

The number after this is a 5.

This is '5 and higher' so round up.

Round up by increasing the **required figure** by 1.  $6+1=7$

Add three noughts, one to replace the 5, one for the 4 and one for the 3. So this becomes 877 000 to the nearest thousand.

### Strategy

Look at the number after the **required figure**.

Round up for this number being 5 and higher.

Round down for this number being 4 and below.

Round down by making numbers nought after the required figure. Round up by increasing the **required figure** by one, the numbers thereafter become noughts.

### Your Turn!!

Round 123 456 to the nearest a) ten b) hundred c) thousand

### Be careful when rounding 9s up

### Example

Round the number 5967 to the nearest 100.

### Solution


The required figure is the 9 and the 6 after it means you need to round up.

Round the 9 and the digit to its left up by 1 so,  $59 \rightarrow 60$ . So 5967 to the nearest 100 becomes 6000.


### Your Turn!!

Round 59896 to the nearest d) ten e) hundred f) thousand

### RAPID 'ACID' TEST – Blank out the page above before answering these!

 1. Round 15973 to the nearest a) ten b) hundred c) thousand

## Estimate Answers to Basic Sums – iNA4

 Do all of iNA4 without a calculator!

A calculation can often be estimated by rounding each number so that it has only 1 non-zero digit, for example rounding  $125 \rightarrow 100$ ,  $5652 \rightarrow 6000$  etc.

### Example

Estimate an answer to a)  $1234 \times 8876$  b)  $\frac{234 \times 44}{96}$

### Solution


a)  $1234 \times 8876 \approx 1000 \times 9000 = 9000000$  b)  $\frac{234 \times 44}{96} \approx \frac{200 \times 40}{100} = \frac{8000}{100} = 80$

**Note:**  $\approx$  means approximately equals to

### Your Turn!!

Similarly estimate an answer to a)  $5132 \times 6852$  b)  $\frac{1111}{111}$

### RAPID 'ACID' TEST – Blank out the page above before answering these!

 1. By rounding each number to one digit estimate an answer to a)  $111 \times 888$  b)  $\frac{995}{51}$