


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) 1234×8876 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) 5132×6852 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) 111×888 b) $\frac{995}{51}$