

Using Rounding to Estimate Answers

Make sure you know your tables!

Use rounding to simplify the estimation of the answer to a question

It is possible to "**MENTALLY**" estimate the answer to a question by rounding the numbers to "**1 figure**" accuracy first.

Examples :-

$$\begin{aligned} 51 + 78 \\ \text{is approximately} \\ 50 + 80 \\ \approx 130 \end{aligned}$$

$$\begin{aligned} 792 - 323 \\ \text{is approximately} \\ 800 - 300 \\ \approx 500 \end{aligned}$$

" \approx " means **approximately** equal to.

Exercise 5



1. Round each number to **1 figure accuracy**, then give an **estimate** to :-

- | | | | | | | | |
|---|-------------|---|-------------|---|--------------|---|--------------|
| a | $18 + 61$ | b | $41 + 57$ | c | $72 - 56$ | d | $68 + 23$ |
| e | $91 - 19$ | f | $285 + 149$ | g | $708 - 169$ | h | $137 + 917$ |
| i | $456 + 274$ | j | $890 - 678$ | k | $1811 + 518$ | l | $3822 - 829$ |

2. a Denis has 291 Jinju cards, Frank has 87.

Approximately, how many do they have in total?

b Cheryl has saved £423. Heather has saved £572.
Approximately, how much have they saved in total?

c Calculate, approximately, the **total** distance around the square shown.



48 cm



3. Give an approximate answer to each of the following :-

- | | | | | | | | |
|---|-------------|---|-------------|---|-------------|---|-------------|
| a | $66 - 28$ | b | $88 - 21$ | c | $417 - 98$ | d | $807 - 180$ |
| e | $915 - 777$ | f | $888 - 326$ | g | $541 - 196$ | h | $982 - 655$ |

4. Round each number to **1 figure accuracy**, then give an **estimate** to :-

- | | | | | | | | |
|---|----------------|---|-------------------|---|------------------|---|-------------------|
| a | $47 + 41 + 38$ | b | $697 + 328 - 789$ | c | $885 - 519 - 99$ | d | $712 + 301 - 559$ |
|---|----------------|---|-------------------|---|------------------|---|-------------------|

5. a There are 219 nails in a box. Approximately how many are there in 4 boxes?

b Of the 990 bananas delivered to a supermarket, 164 of them were bad.
Approximately how many of the bananas were ok to eat?

c What is $199 + 299 + 399 + 499$ approximately equal to?

