

ESTIMATION

INTRODUCTION

SUBJECT : MATHEMATICS
CHAPTER NUMBER: 02
CHAPTER NAME : ESTIMATION
SUB TOPIC: Introduction, Rounding off Numbers to
Nearest Ten, Hundred and Thousand
PERIOD NO:1

CHANGING YOUR TOMORROW

Learning outcomes

- *Students will be able to round off given number to nearest ten.
- *Students will be able to round off given number to nearest hundred.
- *Students will be able to round off given number to nearest thousand.
- *Students will be able to solve problems based on rounding off.

Rounding off to nearest 10, 100,1000 will be explained with the help of a video.

<https://www.youtube.com/watch?v=jvp0mtr1kFM>

ROUNDING OFF TO NEAREST TEN ,HUNDRED AND THOUSAND

ROUNDING OFF

- the process of deleting nonsignificant digits from a calculated number.

Rules for Rounding Off Numbers

If the first digit to be dropped is:	Then the last significant digit should:	Examples (Rounded off to 3 sig. figs.)
Greater than 5	Be increased by 1	42.68 → 42.7 5.3999 → 5.40
Less than 5	Stay the same	17.326 → 17.3 0.9994 → 0.999
5, followed by nonzero digit(s)	Be increased by 1	2.7852 → 2.79 15.555 → 15.6

LETS KNOW ABOUT ROUNDING OFF NUMBERS

$\underline{1}2 \rightarrow 10$ $1,3\underline{4}4 \rightarrow 1,340$

$\underline{1}14 \rightarrow 110$ $1,4\underline{8}8 \rightarrow 1,490$

$\underline{5}8 \rightarrow 60$ $\underline{9}9 \rightarrow 100$

ROUNDING NUMBERS



Rounding Numbers

5 or more, ↑
let it soar.

4 or less, ↓
let it rest.

ROUNDING OFF TO NEAREST TEN ,HUNDRED AND THOUSAND

Q1.Round off

- i) 62 and 87 to nearest ten
- ii) 748 and 2667 to nearest hundred
- iii) 6475 and 6732 to nearest thousand

Solution:

- (i) 62 to the nearest ten is 60
87 to the nearest ten is 90
- (ii) 748 to the nearest hundred is 700
2667 to the nearest hundred is 2700
- (iii) 6475 to the nearest thousand is 6000
6732 to the nearest thousand is 7000

Evaluation Questions

1. Round off each of the following to the nearest ten:

ii) 265 v) 6294

Solution:

If the ones place digit is less than 5, replace ones digit by 0, and keep the other digit as the same

And if the digit at ones place is 5 or more than 5, increase tens digit by 1 and replace ones digit by 0

(ii) 265 to the nearest ten is 270

(v) 6294 to the nearest ten is 6290

Evaluation Questions

Q2. Round off each of the following to the nearest hundred:

(ii) 784

(v) 6388

Solution:

If the digit at tens place is less than 5, replace each one of tens and ones digits by 0 and keep the other digits as the same

If the tens digit is 5 or more than 5, increase the hundreds digit by 1 and replace each of tens and ones digit by 0

(ii) 784 to the nearest hundred is 800

(v) 6388 to the nearest hundred is 6400

Evaluation Questions

3. Round off each of the following to the nearest thousand:

(iii) 25352

(v) 9248

Solution:

Observe the hundreds digit of the given number

If the hundreds digit is less than 5, replace each one of hundreds, tens, and ones digits by 0 and keep the other digits as same

If hundreds digit is 5 or more than 5 in the given number, increase thousand digit by 1 and replace each other digit on its right by 0

(iii) 25352 to the nearest thousand is 25000

(v) 9248 to the nearest thousand is 9000

Home assignment

Q1. When rounded off to nearest thousands, the number 85642 is
(a) 85600 (b) 85700
(c) 85000 (d) 86000

Q2. The greatest number which on rounding off to nearest thousands gives 5000, is
(a) 5001 (b) 5559 (c) 5999 (d) 5499

HW
EX 1A. Q.NO.4

THANKING YOU
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