

SESSION : 11

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 6

CHAPTER NAME : Rounding off- Estimation

SUBTOPIC : Estimation in number operation

EXERCISE – 6 (B) Q. No. 1 and 2

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

Enable the students

- **To understand the need of rounding off**
- **To apply it in day to day life**
- **To get a general idea about situations involving addition, subtraction, multiplication or division.**

6.2 ESTIMATION IN NUMBERS OPERATIONS

Estimation helps us to get a general idea about situations involving addition, subtraction, multiplication or division. It can be extremely useful to calculate costs, expenditure, profits, losses, etc. while dealing with the actual numbers.

An estimation is the answer close to the actual answer.



EXERCISE 6 (B)

Q.1 Estimate the following sum by rounding off to the nearest lakh and check with the actual answer

a) $29,35,908 + 36,44,009 + 49,99,078$

Solution :

$$29,35,908 \text{ rounding off to the nearest lakh} = 29,00,000$$

$$36,44,009 \text{ rounding off to the nearest lakh} = 36,00,000$$

$$49,99,078 \text{ rounding off to the nearest lakh} = \begin{array}{r} + \\ 50,00,000 \end{array}$$

$$\text{So, the estimated sum is} = 1,15,00,000$$

$$\text{The actual sum is} = 29,35,908 + 36,44,009 + 49,99,078$$

$$= 1,15,78,995$$

So, Estimated sum – Actual sum

$$1,15,78,995 - 1,15,00,000 = 78,995$$

EXERCISE 6 (B)

Q.1 Estimate the following sum by rounding off to the nearest lakh and check with the actual answer

b) $56,21,424 + 94,52,137 + 13,79,555$

Solution :

$$56,21,424 \text{ rounding off to the nearest lakh} = 56,00,000$$

$$94,52,137 \text{ rounding off to the nearest lakh} = 95,00,000$$

$$13,79,555 \text{ rounding off to the nearest lakh} = \begin{array}{r} + \\ 14,00,000 \end{array}$$

$$\text{So, the estimated sum is} = 1,65,00,000$$

$$\text{The actual sum is} = 56,21,424 + 94,52,137 + 13,79,555$$

$$= 1,64,53,116$$

So, Estimated sum – Actual sum

$$1,65,00,000 - 1,64,53,116 = 46,884$$

EXERCISE 6 (B)

Q.1 Estimate the following sum by rounding off to the nearest lakh and check with the actual answer

c) $67,00,500 + 39,58,389 + 8,88,642$

Solution :

$$67,00,500 \text{ rounding off to the nearest lakh} = 67,00,000$$

$$39,58,389 \text{ rounding off to the nearest lakh} = 40,00,000$$

$$8,88,642 \text{ rounding off to the nearest lakh} = \begin{array}{r} + \\ 9,00,000 \end{array}$$

$$\text{So, the estimated sum is} = 1,16,00,000$$

$$\text{The actual sum is} = 67,00,500 + 39,58,389 + 8,88,642$$

$$= 1,15,47,531$$

So, Estimated sum – Actual sum

$$1,16,00,000 - 1,15,47,531 = 52,469$$

EXERCISE 6 (B)

Q.2 Estimate the following difference by rounding off to the nearest 10,000.

a) $53,708 - 48,677$

Solution :

$$53,708 \text{ rounding off to the nearest } 10,000 = 50,000$$

$$48,677 \text{ rounding off to the nearest } 10,000 = 50,000$$

$$\text{The estimated difference} = 0$$

So, the estimated difference is 0.

EXERCISE 6 (B)

Q.2 Estimate the following difference by rounding off to the nearest 10,000.

b) $66,578 - 19,304$

Solution :

$$66,578 \text{ rounding off to the nearest } 10,000 = 70,000$$

$$19,304 \text{ rounding off to the nearest } 10,000 = 20,000$$

$$\text{The estimated difference} = 50,000$$

So, the estimated difference is 50.000.

EXERCISE 6 (B)

Q.2 Estimate the following difference by rounding off to the nearest 10,000 :

c) $1,87,355 - 89,856$

Solution :

$$1,87,355 \text{ rounding off to the nearest } 10,000 = 1,90,000$$

$$89,856 \text{ rounding off to the nearest } 10,000 = \begin{array}{r} - \\ 90,000 \end{array}$$

$$\text{The estimated difference} = 1,00,000$$

So, the estimated difference is 1,00,000.

LEARNING OUTCOME:

Students are able

- **To understand the need of rounding off**
- **To apply it in day to day life**
- **To get a general idea about situations involving addition, subtraction, multiplication or division.**

HOME WORK-

Complete Ex 6 (B) Q. No 2 in the notebook

THANKING YOU
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