

# ESTIMATION

**SUBJECT : MATHEMATICS**  
**CHAPTER NUMBER: 02**  
**CHAPTER NAME : ESTIMATION**  
**SUB TOPIC: Estimation of Numbers**  
**PERIOD NO :2**

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**CHANGING YOUR TOMORROW**

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# Learning outcomes

- \*Students will be able to estimate the sum.
- \*Student will be able to estimate the difference
- \*Student will be able to estimate the product

# RULES OF ESTIMATION

- Step 1: Underline the place value we are looking for.
- Step 2: Circle the number immediately to the **right** of our place value number.
- Step 3: If the circled number is:
  - **5 or more, we raise the score (add 1 to our place value)**
  - **4 or less, we let it rest (leave the place value number the same)**
- Step 4: We change all values after our underlined place value to a zero.

## Estimation Rules

## Previous Knowledge Test

1. When rounded off to nearest thousands, the number 85642 is

(a) 85600 (b) 85700 (c) 85000 (d) 86000

2. State true or false

i) The number 85764 rounded off to nearest hundreds is written as 85700.

ii) Estimated sum of 7826 and 12469 rounded off to hundreds is 20,000.

10. Find the largest number formed by the digits 4, 3, 0, 9. Round it off to the nearest thousand.

Estimation of the sum, difference and product will be explained with the help of a video

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

## Estimation of Numbers

Q1. Estimate the following

i) sum of 76 and 62 to its nearest ten.

ii) 6352-2086 to its nearest hundred.

iii)  $74 \times 67$  to nearest ten.

Solution:

(i) 76 to the nearest ten is 80

62 to the nearest ten is 60

Sum of these numbers =  $80 + 60$

= 140

∴ Required sum = 140

ii) 6352 to the nearest hundred = 6400 and

2086 to the nearest hundred = 2100

∴ Required difference =  $(6400 - 2100)$

= 4300

iii) ) 74 to the nearest ten = 70 and

67 to the nearest ten = 70

∴ Required product =  $(70 \times 70)$

= 4900

# Lets Estimate

## Sweet Estimation



Estimate the sum by rounding each addend to the nearest hundred. Show your work!

$$\begin{array}{r} 189 \rightarrow \\ + 334 \rightarrow \\ \hline \end{array} \quad \begin{array}{r} 200 \\ + 300 \\ \hline 500 \end{array}$$

$$\begin{array}{r} 441 \rightarrow \\ + 323 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 252 \rightarrow \\ + 368 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 363 \rightarrow \\ + 429 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 598 \rightarrow \\ + 176 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 625 \rightarrow \\ + 238 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 324 \rightarrow \\ + 150 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 716 \rightarrow \\ + 202 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 137 \rightarrow \\ + 381 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 681 \rightarrow \\ + 99 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 528 \rightarrow \\ + 145 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 848 \rightarrow \\ + 136 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 463 \rightarrow \\ + 276 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 701 \rightarrow \\ + 163 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

$$\begin{array}{r} 648 \rightarrow \\ + 220 \rightarrow \\ \hline \end{array} \quad + \underline{\hspace{2cm}}$$

# Evaluation Questions

1. Estimate the sum of each pair of numbers to the nearest ten :

(i) 67 and 44

(ii) 34 and 87

**Solution:**

(i) 67 to the nearest ten is 70

44 to the nearest ten is 40

Sum of these numbers =  $70 + 40 = 110$

∴ Required sum = 110

(ii) 34 to the nearest ten is 30

87 to the nearest ten is 90

Sum of these numbers =  $30 + 90 = 120$



# Evaluation Questions

**2. Estimate the sum of each pair of numbers to the nearest hundred:**

**(i) 336 and 782**

**(iii) 270 and 495**

**Solution:**

(i) 336 to the nearest hundred is 300 and 782 to the nearest hundred is 800

Sum of these numbers =  $(300 + 800)$

= 1100

∴ Required sum = 1100

(iii) 270 to the nearest hundred is 300 and 495 to the nearest hundred is 500

Sum of these numbers =  $(300 + 500) = 800$

∴ Required sum = 800

# Evaluation Questions

**5. Estimate each difference to the nearest hundred:**

**(i) 769 – 314**

**(ii) 856 – 687**

**Solution:**

(i) 769 to the nearest hundred = 800 and  
314 to the nearest hundred = 300

∴ Required difference = (800 – 300)  
= 500

(ii) 856 to the nearest hundred = 900 and  
687 to the nearest hundred = 700

∴ Required difference = (900 – 700)  
= 200

## Home assignment

### AHA

Q1. The largest number formed by the digits 4, 3, 0, 9, rounded off to the nearest thousand is .....

Q2. The sum of my digits is 12. When rounded off to the nearest hundred. I am 500. Rounding to the nearest 10 makes me 530. What am I ?

Q3. Estimate the following products to the nearest ten:

(a)  $578 \times 161$  (b)  $5281 \times 3491$  (c)  $1291 \times 592$  (d)  $9250 \times 29$

HW  
EX.2B. Q.NO.4

**THANKING YOU**  
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