

SESSION : 3

CLASS : 3

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 4

CHAPTER NAME : SUBTRACTION

SUBTOPIC : SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

The children will

- * Develop conceptual understanding**
- * Identify subtraction problems that require regrouping**
- * Perform subtraction of a 4-digit number from a 4-digit number with regrouping**

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

I am a 4-digit number and
my all the places is the
greatest 1-digit number.

9999

WHO AM I ??????



SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

I am a digit who has no value in the hundred, tens and ones places andthe predecessor of 2 in the thousands place.

1000

WHO AM I ??????



SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)



SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)



Let us form greatest and smallest number with the given digits:

9310

1039

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

OUR TWO NUMBERS
ARE....

9310

and

1039

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

Now let us write in column:

$$\begin{array}{r} \\ \\ \\ \\ 9 \\ - 1 \\ \hline 8 \end{array}$$

Diagram illustrating the subtraction process with regrouping. The numbers are written in columns: 9, 0, 3, 9 (top row) and 1, 0, 3, 9 (bottom row). The result is 8, 2, 7, 1. Arrows indicate the regrouping process: 2 tens are borrowed from the tens place to the ones place, and 0 tens are borrowed from the tens place to the ones place. The numbers 3, 1, and 0 are crossed out, and 2, 0, and 0 are written above them. The final result is 8, 2, 7, 1.

STEP 1 - Subtract the ones:

$$10 + 0 = 10 - 9 = 1 \text{ ones}$$

STEP 2 - Subtract the tens:

$$1 - 1 = 0, 10 + 0 = 10 - 3 = 7 \text{ ten}$$

STEP 3 - Subtract the hundreds:

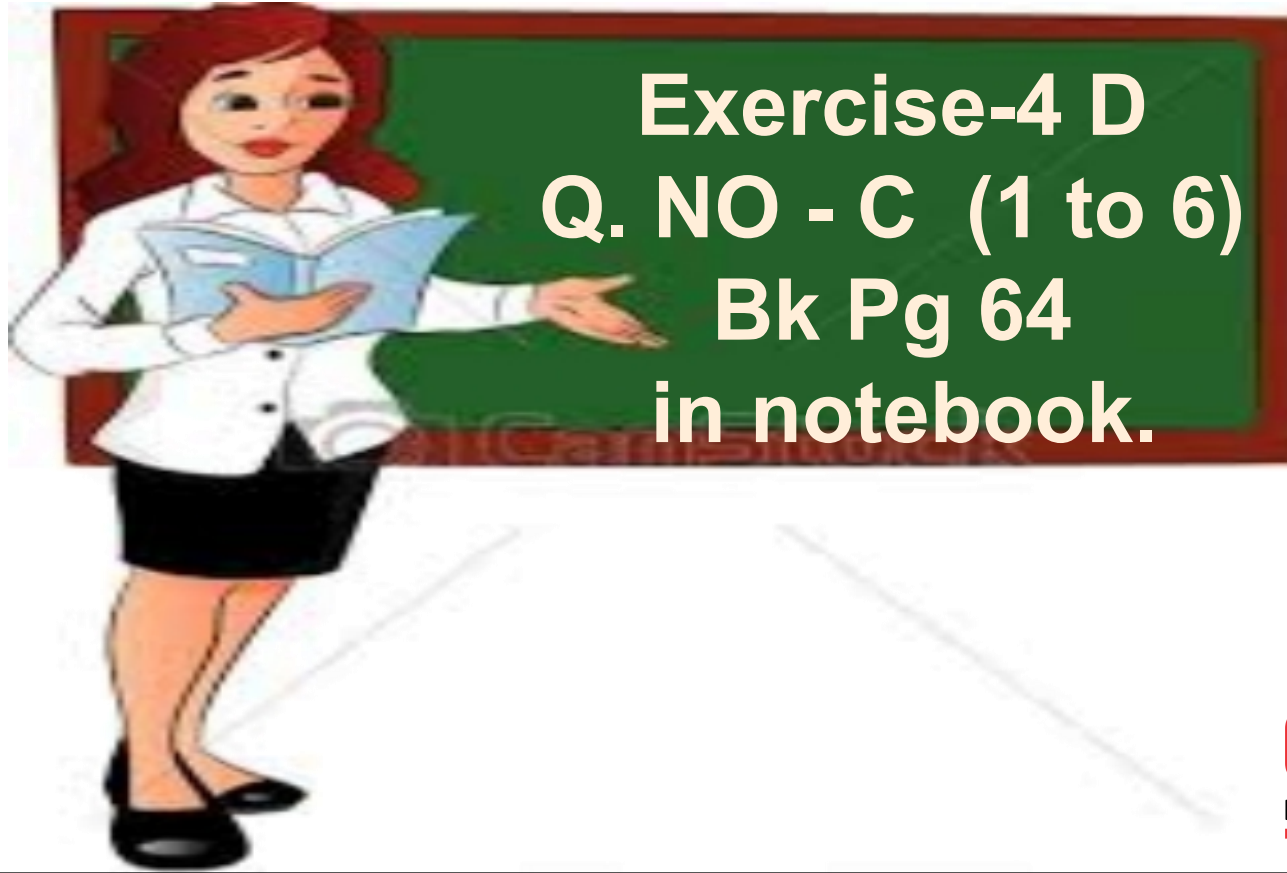
$$3 - 1 = 2, 2 - 0 = 2 \text{ hundreds}$$

STEP 4 - Subtract the thousands:

$$9 - 1 = 8 \text{ thousands}$$

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)



SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

C. Find the difference between the given numbers.

1) 3621 and 5372

$$\begin{array}{r} 4 13 \\ 10+3 \\ \begin{array}{r} \cancel{5} \\ \cancel{3} \end{array} \\ \begin{array}{r} 5372 \\ - 3621 \\ \hline 1751 \end{array} \end{array}$$

The diagram illustrates the subtraction of 3621 from 5372. The numbers are aligned by place value. The top number, 5372, is shown in a green bar, and the bottom number, 3621, is shown in a cyan bar. A yellow box containing a minus sign is placed to the left of the numbers. A horizontal line is drawn below the numbers. The result, 1751, is written below the line. The number 5372 is crossed out with diagonal lines. Above the 5, there is a '4' and an arrow pointing to the 3. Above the 3, there is a '13' and '10+3'. The result 1751 is written below the line.

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

2) 6432 and 2515

$$\begin{array}{r} \begin{array}{cccc} & 5 & & 2 \\ & \nearrow & & \nearrow \\ \cancel{6} & \cancel{4} & \cancel{3} & \cancel{2} \end{array} & \begin{array}{c} 14 \\ 10+4 \end{array} & \begin{array}{c} 12 \\ 10+2 \end{array} \\ - \begin{array}{cccc} 2 & 5 & 1 & 5 \end{array} \\ \hline 3 & 9 & 1 & 7 \end{array}$$

The diagram illustrates the subtraction of 2515 from 6432 using the regrouping method. The minuend (6432) is shown in a green box with digits crossed out. The subtrahend (2515) is shown in a cyan box. The result (3917) is shown below a horizontal line. Arrows indicate the regrouping process: 5 tens are borrowed from the 6 hundreds to make 14 tens, and 2 tens are borrowed from the 3 tens to make 12 tens. The numbers 14 and 12 are written above the 4 and 3 respectively, with the equations 10+4 and 10+2 shown below them.

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

4) 2943 and 7564

$$\begin{array}{r} 6 \\ 15 \\ 10+5 \\ \begin{array}{r} \cancel{7} \\ \cancel{5} \\ \\ \end{array} \\ \begin{array}{r} \\ \\ \\ \end{array} \\ \hline \begin{array}{r} \\ \\ \\ \end{array} \end{array}$$

The diagram illustrates the subtraction of 2943 from 7564 using a place value chart. The top row (7564) is highlighted in green, and the bottom row (2943) is highlighted in cyan. A yellow box with a minus sign is to the left of the second row. A horizontal line is drawn below the second row. The result (4621) is shown below the line. An arrow points from the 7 in the thousands place to the 5 in the hundreds place, with the number 6 written above it. Another arrow points from the 5 in the hundreds place to the 4 in the tens place, with the number 15 written above it. The text "10+5" is written above the 5 in the hundreds place.

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

5) 8020 and 3457

$$\begin{array}{r} 7 \\ 9 \\ 10 \rightarrow 10+1 \\ 10 \\ 1 \\ 10+0 \\ \hline \begin{array}{r} \cancel{8} \\ \cancel{0} \\ \cancel{2} \\ \cancel{0} \end{array} \\ - \begin{array}{r} 3 \\ 4 \\ 5 \\ 7 \end{array} \\ \hline \begin{array}{r} 4 \\ 5 \\ 6 \\ 3 \end{array} \end{array}$$

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

6) 7264 and 4938

$$\begin{array}{r} \begin{array}{cccc} & 6 & & 5 \\ & \nearrow & & \nearrow \\ & 10+2 & & 10+4 \\ \hline \cancel{7} & \cancel{2} & \cancel{6} & \cancel{4} \end{array} \\ - \begin{array}{cccc} 4 & 9 & 3 & 8 \end{array} \\ \hline \begin{array}{cccc} 2 & 3 & 2 & 6 \end{array} \end{array}$$

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)

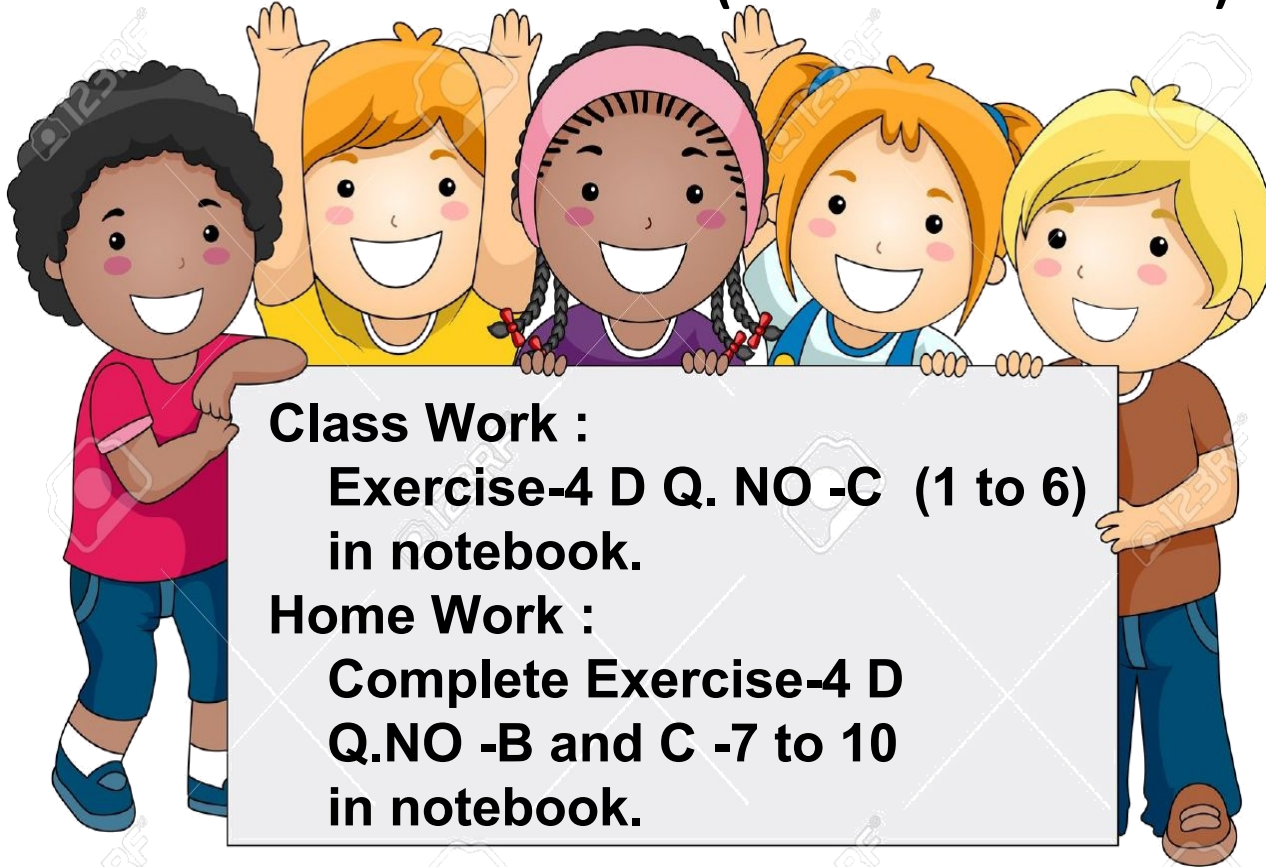
Subtraction of 4-digit numbers
by Regrouping

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Activate

SUBTRACTION

SUBTRACTION WITH 4-DIGIT NUMBERS (WITH REGROUPING)



Class Work :

**Exercise-4 D Q. NO -C (1 to 6)
in notebook.**

Home Work :

**Complete Exercise-4 D
Q.NO -B and C -7 to 10
in notebook.**

LEARNING OUTCOME:

Children are confident of developing conceptual understanding, identify subtraction problems that require regrouping and perform subtraction of a 4-digit number from a 4-digit number with regrouping .



THANKING YOU
ODM EDUCATIONAL GROUP