

SESSION : 20

CLASS : 3

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 4

CHAPTER NAME : SUBTRACTION

**SUBTOPIC : SUBTRACTION OF A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER
(WITH REGROUPING)**

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

The children will

- * Develop conceptual understanding**
- * Identify subtraction problems that require regrouping**
- * Perform subtraction of a 3-digit number from a 3-digit number with regrouping**

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

**Children can you say different
3-digit numbers?**

**See the examples now → 965, 782,
351, 540, 865, 394.....**

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)



Now let us take any two 3-digit numbers from the previous slide, say 782 and another 3-digit number, say 394. Now let us recall how to subtract.

SUBTRACTION

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OUR TWO NUMBERS
ARE....

782

and

394

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

REMEMBER

The first thing we should keep in mind is that we should write the greater number at the top first and then the smaller number below it and then subtract. Because we can only subtract a smaller number from a bigger number, we cannot subtract a bigger number from a smaller.

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$$782 - 394$$

At first, we have to subtract the ones place. As 2 is smaller than 4, so we have to borrow 1 ten and add with 2. So, it becomes $2 + 10 = 12$
 $12 - 4 = 8$. We should write 8 in the ones place.

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A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

$$782 - 394$$

As we borrowed 1 ten to add with ones, we have $8 - 1 = 7$. Then we have to subtract the tens place. We have now 7 in tens place. 7 is smaller than 9, so we have to borrow 1 hundred and add with 7. So, it becomes $7 + 10 = 17$ $17 - 9 = 8$. We should write 8 in the tens place.

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$$782 - 394$$

As we borrowed 1 hundred to add with tens, we have $7 - 1 = 6$. Then we have to subtract the hundreds place. We have now 6 in hundreds place. 6 is bigger than 3 Then subtract the hundreds place $6 - 3 = 3$. So we will write 3 in the hundreds place.

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A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

Now let us write in column:

$$\begin{array}{r} 6 \\ \cancel{7} \quad \cancel{8} \quad \cancel{2} \\ - \quad 3 \quad 9 \quad 4 \\ \hline 3 \quad 8 \quad 8 \end{array}$$

Diagram illustrating the regrouping process for the subtraction $672 - 394$. The number 672 is written in columns. The 7 in the tens place is crossed out, and a 17 is written above it. An arrow points from the 6 in the hundreds place to the 17. The 8 in the tens place is crossed out, and a 12 is written above it. An arrow points from the 17 to the 12. The 2 in the ones place is crossed out, and a 2 is written below it. The equation $10 + 7 = 17$ and $10 + 2 = 12$ is shown above the 17 and 12 respectively.

Subtract the ones:

$$10 + 2 = 12 - 4 = 8 \text{ ones}$$

Subtract the tens:

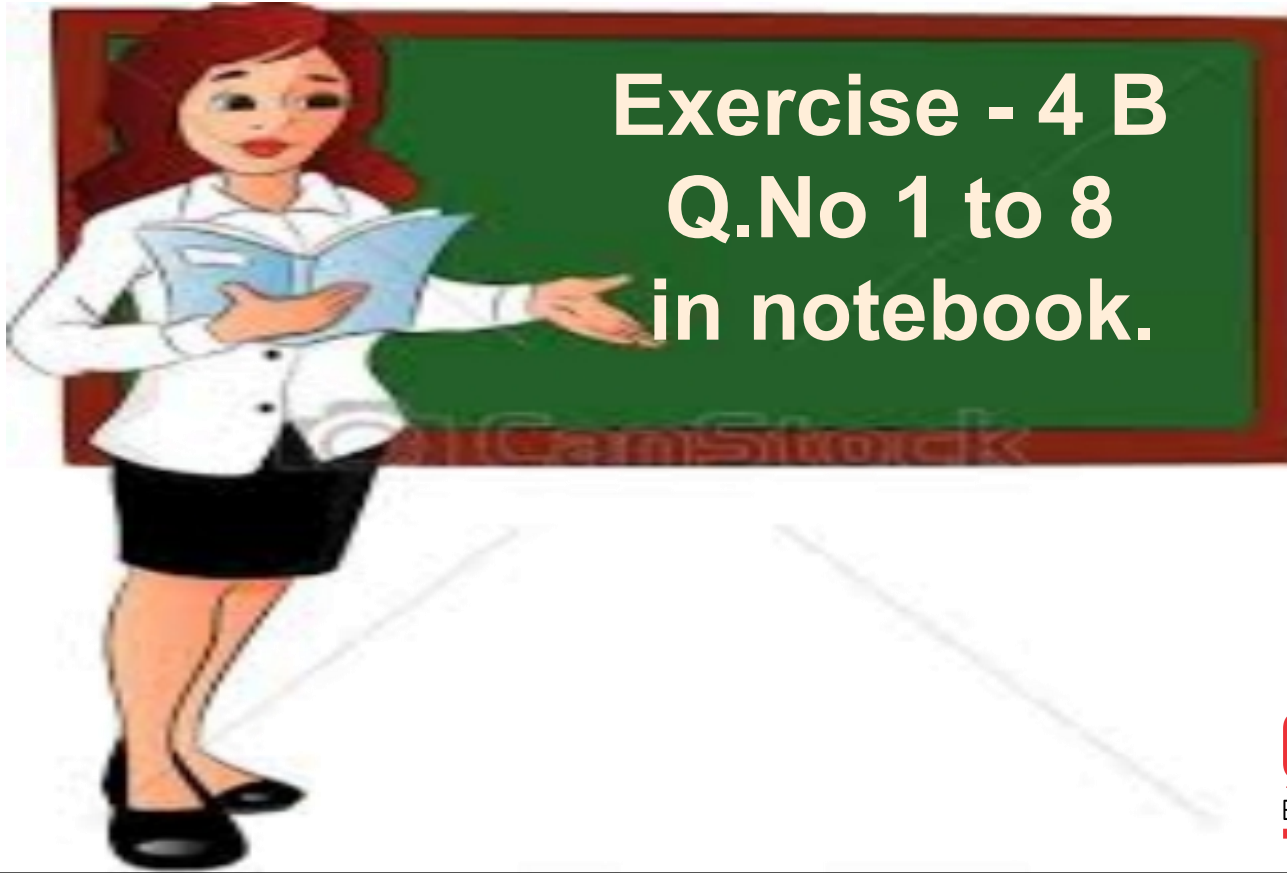
$$10 + 7 = 17 - 9 = 8 \text{ tens}$$

Subtract the hundreds:

$$6 - 3 = 3 \text{ hundreds}$$

SUBTRACTION

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SUBTRACTION

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Subtract the following.

1)

$$\begin{array}{r} 217 \\ - 108 \\ \hline 109 \end{array}$$

The diagram illustrates the subtraction of 108 from 217. The number 217 is represented in a green bar, and 108 is in a cyan bar. A yellow box with a minus sign is to the left. A horizontal line is drawn below the numbers. The result 109 is shown below the line. An arrow points from the 1 in the tens place of the minuend to the 0 in the tens place of the subtrahend, with "10+7" written above it, indicating the regrouping process.

SUBTRACTION

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2)

$$\begin{array}{r} 124 \\ - 135 \\ \hline 089 \end{array}$$

The diagram illustrates the regrouping process for the subtraction $124 - 135$. The minuend 124 is shown with a green background, and the subtrahend 135 is shown with a cyan background. The result 089 is shown below a horizontal line. The tens digit of the minuend (2) is crossed out, and the tens digit of the subtrahend (3) is crossed out. Arrows indicate the regrouping process: 1 ten is moved to the tens place, making it $10+1$, and then 10 is moved to the ones place, making it $10+4$.

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

3)

$$\begin{array}{r} \text{3} \quad \text{10} \quad \text{4} \quad \text{4} \quad \text{10+1} \\ \text{4} \quad \text{4} \quad \text{1} \\ - \text{1} \quad \text{5} \quad \text{2} \\ \hline \text{2} \quad \text{9} \quad \text{9} \end{array}$$

SUBTRACTION

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4)

$$\begin{array}{r} 845 \\ - 429 \\ \hline 416 \end{array}$$

3 \rightarrow 10+5

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

5)

$$\begin{array}{r} 2 \qquad 10+7 \qquad 10+8 \\ \cancel{3} \quad \cancel{8} \quad \cancel{8} \\ - 1 \quad 9 \quad 9 \\ \hline 1 \quad 8 \quad 9 \end{array}$$

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

6)

$$\begin{array}{r} 1 \\ 10 \\ 3 \\ 10 \\ 8 \\ \hline 2 \\ - 1 \\ \hline 0 \end{array}$$

SUBTRACTION

A 3-DIGIT NUMBER FROM A 3-DIGIT NUMBER (WITH REGROUPING)

7)

$$\begin{array}{r} \text{2} \quad \text{10} \quad \text{10} \\ \text{3} \quad \text{7} \quad \text{2} \\ - \quad \text{1} \quad \text{8} \quad \text{6} \\ \hline \text{1} \quad \text{8} \quad \text{6} \end{array}$$

The diagram illustrates the subtraction of 186 from 372 using the regrouping method. The minuend 372 is shown in a green bar, and the subtrahend 186 is shown in a cyan bar. A yellow box with a minus sign is placed to the left of the subtraction symbol. The result 186 is shown below a horizontal line. Arrows indicate the regrouping process: one ten from the tens place is moved to the hundreds place, and one ten from the tens place is moved to the ones place. The numbers 10, 10, and 6 are written above the regrouped digits, and the original digits 3, 7, and 2 are crossed out.

SUBTRACTION

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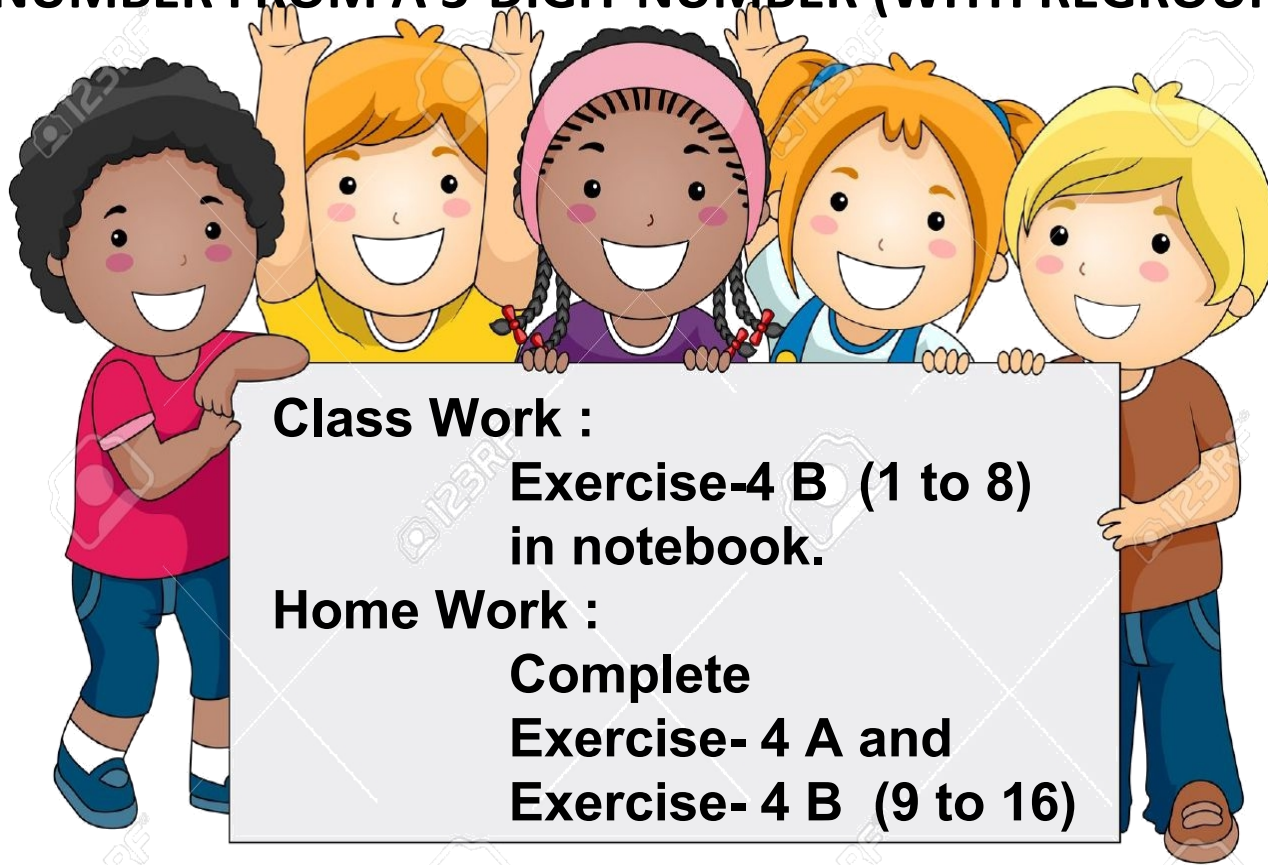
8)

$$\begin{array}{r} \text{8} \\ \text{8} \text{ } \text{9} \text{ } \text{1} \\ - \text{6} \text{ } \text{4} \text{ } \text{3} \\ \hline \text{2} \text{ } \text{4} \text{ } \text{8} \end{array}$$

The diagram illustrates the subtraction process with regrouping. The top number is 891, and the bottom number is 643. A yellow box containing a minus sign is positioned to the left of the numbers. The top number is written in a green box, and the bottom number is written in a cyan box. A horizontal line is drawn below the numbers. The result, 248, is written below the line. An arrow points from the 9 in the top number to the 10+1, indicating the regrouping process. The 8 above the 9 indicates that 8 tens were added to the 9 ones to make 10+1 ones.

SUBTRACTION

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Class Work :

**Exercise-4 B (1 to 8)
in notebook.**

Home Work :

**Complete
Exercise- 4 A and
Exercise- 4 B (9 to 16)**

LEARNING OUTCOME:

Children are confident of developing conceptual understanding, identify subtraction problems, to use two different strategies to subtract three-digit numbers and perform subtraction of a 3-digit number from a 3-digit number without regrouping .



THANKING YOU
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