



\*\*\*\* Thus, we can subtract 3 from 12 four times to get 0, as there are 3 fours in 12. In other words, we can say that 12 divided by 3 is equal to 4.















\*\*\*\*\* Z 3 (b) Total number of tomatoes = 16 Total number of children = 4Now, the number of tomatoes to be shared among each child =  $16 \div 4 = 4$ .

\*\*\*\* 3 **EXAMPLE 4 : Show division as repeated subtraction by** dividing 30 by 5. **SOLUTION** : 30 ÷ 5 can be shown as repeated subtraction as given below : 30 - 5 = 25, 25 - 5 = 20, 20 - 5 = 15,15 - 5 = 10, 10 - 5 = 5, 5 - 5 = 0









\*\*\*\* **2** Subtract 3 from 3. So, we can subtract 3 from 3 for one time. 3 Hence,  $3 \div 3 = 1$ Similarly,  $5 \div 5 = 1$ , 1 time -3  $8 \div 8 = 1$  etc. We observe that : Every number (except zero) divides itself exactly and the quotient is 1.

\*\*\*\* **3** Subtract 0 repeatedly from 3. S 91 0 3 When we subtract 0 from 3, 1 time the difference remains same i.e. 3. 3 → 2 times Similarly, if we subtract 0 from 2 repeatedly, we get the difference 2. 3 times We observe that : 3 We can not divide any number by 0.



\*\*\*\* LONG DIVISION (WITHOUT REGROUPING) **DIVISION WITHOUT REMAINDER** EXAMPLE 5 : Divide 84 by 4. **SOLUTION** : 84 ÷ 4 = (8 tens and 4 ones) ÷ 4 = 2 tens and 1 one = 21 Working 4) 8 4 2 The Long Division method to get the quotient 21 can be done as follows :

**Step 1**: We arrange the numerals as shown at the right. From the multiplication table of 4, we get 4 two's in 8. So, 2 is the quotient here. We write 2 at the tens place in the quotient and product 8 at the tens place below the dividend.

Step 2 : Subtract product 8 from the tens
 dividend 8. We get 8 tens – 8 tens = 0 tens.
 We write 0 as shown.

\*\*\*\*\*

\*\*\*\*\* **Step 3**: We write 4 ones as shown and divide. 4 ones  $\div$  4 = 1 one We write 1 at the ones place in the quotient. The product 4 is written below 4 as shown at the right.











**EXAMPLE 6** : Divide 884 by 2 and then verify the answer.

\*\*\*\*

# **SOLUTION :** To divide 884 by 2, follow the steps given below.







\*\*\*\*\* **DIVISION WITH REMAINDER** 3 Z EXAMPLE 7 : Divide 16 by 3. **SOLUTION :** First, we arrange the numerals at right places.  $\sqrt[3]{16}$ 

5

 $\sqrt[3]{16}$ 

-15



\*\*\*\* **Step 1 : From the multiplication table of 3**, we have  $3 \times 5 = 15 < 16$  $3 \times 6 = 18 > 16$ So, here dividend is 15 and 5 is the quotient. Write 15 below the dividend.





## **Dividend = Divisor × Quotient + Remainder**

Here, dividend = 16, divisor = 3, quotient = 5 and remainder = 1.
So, divisor × quotient + remainder = 3 × 5 + 1 = 16 = dividend
Hence, the answer is verified and it is correct.













## LONG DIVISION (WITH REGROUPING)

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## **DIVISION WITHOUT REMAINDER**

We have already learnt how to divide a 2-digit or 3-digit or 4-digit number by a 1-digit number using long division without regrouping. Let us learn such division with regrouping.

















\*\*\*\* Z 3 2 **Step 1 :** We arrange the dividend. From the multiplication table of 3, we have  $3 \times 8 = 24 < 263 \times 9 = 27 > 26$ So, here dividend is 24 and 8 is the quotient. Write 24 below the dividend





**Dividend = Divisor × Quotient + Remainder** 

Here, dividend = 26, divisor = 3, quotient = 8 and remainder = 2.
Now, divisor × quotient + remainder = 3 × 8 + 2 = 26 = dividend
Hence, the answer is verified and it is correct.

















	74 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
6	EXAMPLE : Divide 5493 by 10.
	$\frac{50LUTION:}{405402}$
	10)5493 (
	- 5 0
	49
	- 4 0
	93 Hence, 5493 ÷ 10 gives
þ	-90 549 as the quotient
	3 and 3 as the remainder.
4	
7 (	





PROBLEMS ON DIVISION 2 2 3

### Example

A teacher distributed 387 toffees equally among 9 children. How many toffees does each child get ?

### **SOLUTION :**

For 9 children, the no. of toffees = 387 For 1 child, the no. of toffees =  $(387 \div 9) = 43$ Thus, each child gets 43 toffees.



\*\*\*\*\* 2 2 **Example :** The product of two numbers is 48. If one of them is 8, find the other number. **SOLUTION** : In order to find the other number, we divide 48 by 8. Thus, the other number is 6.