

DIVISION

(Short Division with remainder)

Short division is a method of division usually used for division when the divisor is a single digit number or may be a double digit if you know the table of that number very well as more work has to be done **mentally** in short division. It is very quick and used for simple division problems.

Short division can be done by following easy steps.

For example:

$$73 \div 2$$

1. Write the divisor and the dividend in the division sign.

$$2 \overline{) 73}$$

2. Divide the first digit of the dividend by the divisor. If the divisor is larger than the first digit of the dividend, then try the first two digits. Here, 2 goes into 7 three times with $r=1$ i.e. $7 \div 2 = 3R1$ write 3 over 7 in the quotient area.

$$2 \overline{) 73} \quad 3$$

Now 2×3 gives us 6 and after subtracting 6 from 7, we have a remainder 1.
write 1 on the top left corner of the next digit which is 3 here.

$$2 \overline{) 713} \quad 3$$

3. Now repeat the step 2 for the next digit which is 13 (the remainder 1 and the 2nd digit of dividend 3 makes 13)

$$2 \overline{) 713} \quad 16$$

2 goes into 13 six times with a remainder of 1. Write 6 above 13.
Multiply: $2 \times 6 = 12$. Subtract (mentally): $13 - 12 = 1$, which is our **remainder**.
Since there is no more digit of the dividend left, we are done!

$$73 \div 2 = 16 R 1$$

Repeat the process to get the remainder, if you have a larger digit number.