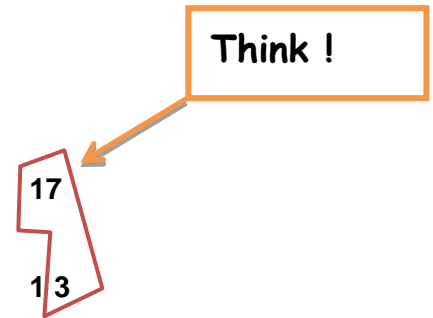


**Multiply up to  $20 \times 20$  in your head.**

Example :  $17 \times 13$

Put the largest number always on top. You think .....  
Group the top number and the second digit of the smaller number.



Now add 17 to 3 and multiply the result by 10... *easy to do in your head.*

$$17 + 3 = 20 \text{ then } 20 \times 10 = 200$$

Add to that the product of the last digits of both numbers:  $7 \times 3 = 21$

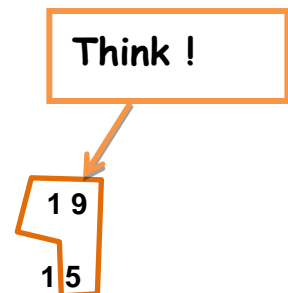
$$200 + 21 = 221$$

And you have the correct result :  $17 \times 13 = 221$

One more to practice the method :  $19 \times 15$

Add 19 to 5:  $19 + 5 = 24$

Multiply by 10:  $24 \times 10 = 240$



Add to 240 the product of 9 and 5:  $9 \times 5 = 45$  and  $240 + 45 = 285$

Test if this is correct :  $19 \times 15 = 285$

You only need both digits of the largest number and the last digit of the smaller number, and all of you are able to multiply by 10 !!