

At 15

9,345       $\rightarrow 45/5 \Rightarrow$  it is divisible by 5

$\rightarrow 9+3+4+5/3 \Rightarrow 21/3 \Rightarrow$  it is divisible by 3.

So, that is divisibility by 15

At 18

5,832       $\rightarrow 2/2 \Rightarrow$  it is divisible by 2

$\rightarrow 5+8+3+2/9 \Rightarrow 18/9 \Rightarrow$  it is divisible by 9.

## Day-2

Divisibility rules for 7

$$(343) \times 7 = 34 - 6 = 28/7$$

$\boxed{3 \times 2}$

Ex:

$$147 \xrightarrow{\boxed{3}} \times 2 \Rightarrow 6$$

$$3 \times \boxed{2} \quad 147 - 6 = 141/7$$

It is divisibility by 7

## Divisibility rules for 17

$$190 \underset{4}{\downarrow} \begin{array}{|c|} \hline 17 \\ \hline \end{array} = 190 - 20 \Rightarrow 170 / 17$$

If it is divisibility by 17

## Divisibility rules for 13

$$325 \underset{5}{\downarrow} \begin{array}{|c|} \hline 13 \\ \hline \end{array} = 32 + 20 = 52 / 13$$

If it is divisibility by 13

## Divisibility rules for 19

$$361 \underset{1}{\downarrow} \begin{array}{|c|} \hline 19 \\ \hline \end{array} = 36 + 2 \Rightarrow 38 / 19$$

If it is divisibility by 19

## Divisibility rules for 11

$$\begin{array}{r} 9 \ 1 \ 7 \ 4 \\ 0 \ 0 \ 0 \ 2 \end{array} = (9+7) - (1+4) = 16 - 5$$

$$= 11 / 11$$

If it is divisibility by 11