

Day-1

## DIVISIBILITY rules

1) Divisibility rule for 5

5  $\rightarrow$   $\frac{\text{last digit}}{\text{last digit}} \rightarrow \text{o/s}$

2	3	4	5	6	7	8
9	10	11	12	13	14	
15	16	17	18	19		

2) Divisibility rule for 10

10  $\rightarrow$   $\frac{\text{last digit}}{\text{last digit}} \rightarrow \text{'0'}$

3) Divisibility rule for 2

2  $\rightarrow$   $\frac{\text{last digit}}{\text{last digit}} \rightarrow \text{0 (or) Even number}$

4) Divisibility rule for 3 and 9

3/9

342 like this sum of digits

is

$$342 = 3 + 4 + 2 = 9/3$$

It is Divisibility by 3

9

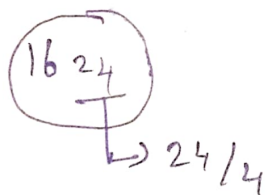
$$243243 = 18/9 =$$

It is Divisibility by 3 (or) 9

DIVISIBILITY rules for 4/8 div:

DIVISIBILITY rules for 4

\* Take the last two digit of a number  
is divisibility by 4 like

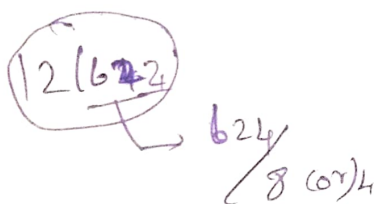


A diagram showing the number 1624. The last two digits, 24, are circled. An arrow points from the circle to the expression  $24/4$ .

It is divisibility by 4

DIVISIBILITY rules for 8.

\* take the last three digit of a number  
is divisibility by 8 like



A diagram showing the number 12624. The last three digits, 624, are circled. An arrow points from the circle to the expression  $624/8 \text{ (or) } 4$ .

It is divisibility by 8.

---

DIVISIBILITY rule for 6, 12, 14, 15, 18

~~At 6~~ when the number is divisibility by  
two number

At 6

$$6 \Rightarrow 126/2, 3 \Rightarrow 9/3$$

12  $\Rightarrow 4/3 \Rightarrow$  It is divisibility by 12

14  $\Rightarrow 7/2 \Rightarrow$  It is divisibility by 14

15  $\Rightarrow 5/3 \Rightarrow$  It is divisibility by 15

18  $\Rightarrow 9/2 \Rightarrow$  It is divisibility by 18

Ex:

At 6

1, 3, 6, 8  $\rightarrow 2 \Rightarrow 8/2 =$  It is divisibility by 2  
 $1+3+6+8 = 18/2$   
 $\rightarrow 3 \Rightarrow \text{It is } \dots \text{ by } 3$

so, that is divisibility by 6

At 12

6, 13, 2  $\rightarrow 32/4 \Rightarrow$  It is divisibility by 4  
 $\rightarrow 6+1+3+2 = 12/3 \Rightarrow$  It is divisibility by 3

so, that is divisibility by 12

At 14

2, 64, 6  $\rightarrow 6/2 \Rightarrow$  It is divisibility by 2  
 $\rightarrow$  Take 2646, Remove first, last digit (6)

double the (6), next subtract from

the rest  $264 - 12 = 252$

Repeat: remove first digit (2), double

it (4)

subtract from the rest  $25 - 4 = 21$

is 21 divisible by 7

It is divisible by 7

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.