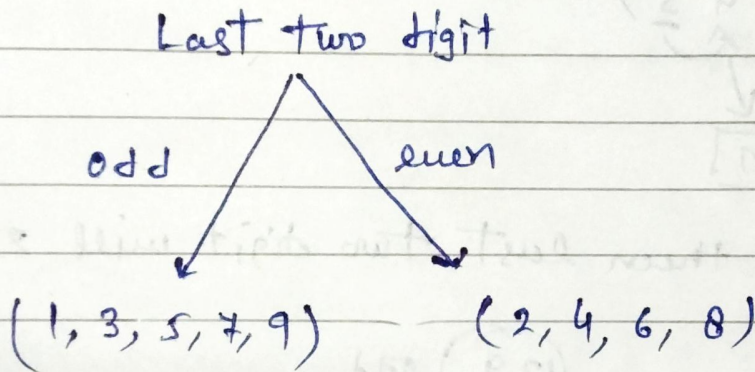
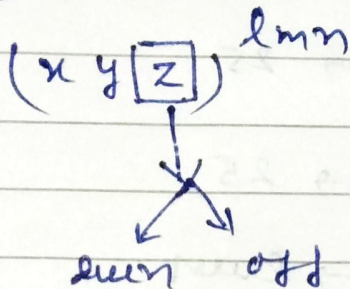
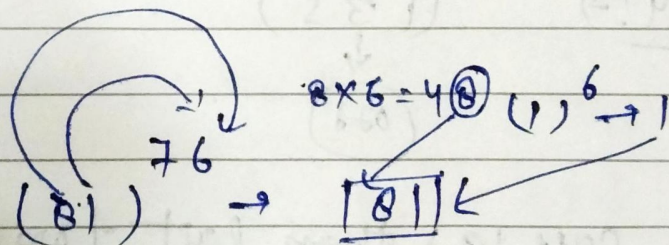


Last two digit

In this topic we will find the last two digit of the given question.



1. if end with 1 ! →



Q1.

(201)⁷⁶

→

(81)⁷⁶

→

[01]

Q2.

(341)¹²³⁵

→

(41)¹²³⁵

→

[01]

4x5=20 (1)5 → 1

2. if end with 5 ! → Base → Power

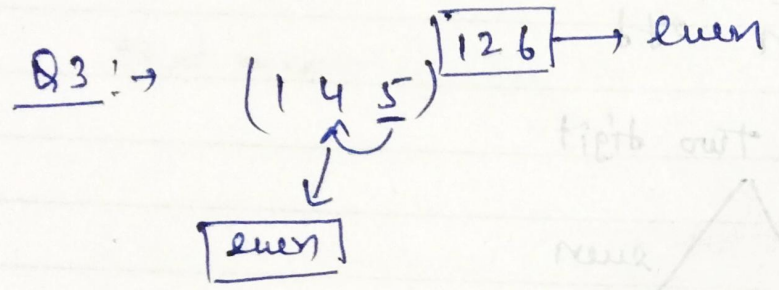
a) odd to odd → 75

b) even to even → 25

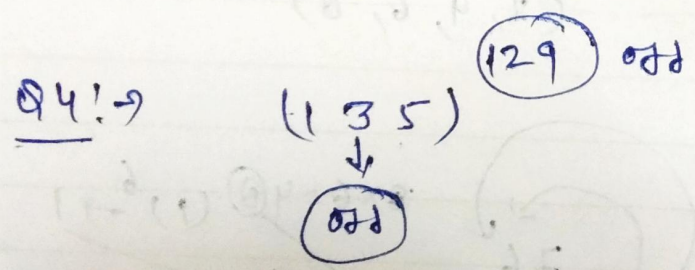
c) even to odd → 25

d) odd to even → 25

MKG



Case (b) then last two digit will 25.



Case (a) then last two digit will 75.

Note ! → As we know the cycle of 3, 7 and 9 is 4, 4 and 2.

we will use this concept for end with 3, 7 & 9.

3. if end with 3, 7 and 9 \Rightarrow

MKG

(29)

Q5 $\Rightarrow (183)^{78}$

3 cycle, 4

$(83)^{78} \rightarrow (83^4)^{19} * (83^2) \text{ --- i)}$ $19 \times 4 \Rightarrow 76$ that near 78.

$(83)^2$

0 — 50 — 100

$100 - 83 \Rightarrow 17 \rightarrow (17)^2 \rightarrow 2$ 89

$(83)^2 \Rightarrow (89)^2$

$(83^4 \rightarrow \square^2 \times \square^2)$

$100 - 89 \rightarrow (11)^2 \Rightarrow 1$ 21

$83^4 \rightarrow 21$

$(89)^2 \Rightarrow 21$

$(21)^{19} \rightarrow 81$

now according to question by eqⁿ i)

$\Rightarrow 81 * 89$ $(\because 83^2 \rightarrow 89)$

\Rightarrow 09 Any

Q6 $\Rightarrow (39)^{45}$

$22 \times 2 \Rightarrow$ 44

$\Rightarrow (39^2)^{22} * 39$

$$\Rightarrow (39^2)^{22} * 39$$

MKG

$$50 - 39 \Rightarrow 11^2 = 121$$

$$(0 - 50 - 100)$$

$$(39)^2 = 21$$

$$(21)^{22} \rightarrow 41$$

$$\Rightarrow 41 * 39 \Rightarrow \boxed{99}$$

4. if end with 2, 4, 6, 8 \rightarrow

$$2 \rightarrow 2$$

$$a^m \rightarrow a^m$$

$$4 \rightarrow 2 \times 2$$

$$a^m * a^m \leftarrow (a^m)^m$$

$$6 \rightarrow 2 \times 3$$

$$8 \rightarrow 2 \times 2 \times 2$$

note! \rightarrow

$$(2^{10})^{\text{even}} \rightarrow 76$$

$$2^{10} \rightarrow 1024$$

$$(2^{10})^{\text{odd}} \rightarrow 24$$

PO

Q7! →

$$(2)^{321} \rightarrow 2^{320} \times 2^1$$

MKG

$$\rightarrow (2^{10})^{32} \times 2^1$$

$$\rightarrow 76 \times 2 \rightarrow 152 \rightarrow \boxed{52}$$

Ans

Q8! →

$$(34)^{45} \Rightarrow (2 \times 17)^{45}$$

$$\Rightarrow 2^{45} \times 17^{45}$$

$$\Rightarrow (2^{40} \times 2^5) \times (17^4)^{11} \times 17$$

$$\Rightarrow (2^{10})^4 \times 2^5 \times (17^4)^{11} \times 17$$

$$\Rightarrow 76 \times 32 \times (17^4)^{11} \times 17$$

new,

$$17^2 \rightarrow (89)^2 \rightarrow 21$$

$$(21)^{11} \rightarrow 21$$

$$0 - 50 - 100$$

~~100~~ 8.

$$100 - 89$$

$$\rightarrow 11$$

$$\rightarrow 121$$

$$\Rightarrow 76 \times 32 \times 21 \times 17$$

$$\Rightarrow 32 \times 21 \times 17 \Rightarrow \boxed{24}$$