How to Solve: Last Two Digits of Numbers ending with 1

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YouTube Video Link to this Post is Here

Following is Covered in the Video

Theory of Last Two Digits of Numbers Ending with 1

> ☞ **Find Last two digits of 131^{345} ?**
> ☞ **Find Last two digits of 781^{984} ?**
> ☞ **Find Last two digits of 15671^{379} ?**

Theory of Last Two Digits of Numbers Ending with 1

- **Units' digit of the number = 1**
- **Tens' digit of the number = Tens' digit of the base * Units' digit of the exponent**

Q1. Find Last two digits of 131^{345} ?

Sol: Base = 131
Exponent = 345

=> Units' digit = 1
=> Tens' digit = 3 * 5 [1**3**1 * 34**5**]
= 5
=> Last two digits = 51

Q2. Find Last two digits of 781^{984} ?

Sol: Base = 781
Exponent = 984

=> Units' digit = 1
=> Tens' digit = 8 * 4 [7**8**1 * 98**4**]
= 2
=> Last two digits = 21

Q3. Find Last two digits of 15671^{379} ?

Sol: Base = 15671
Exponent = 379

=> Units' digit = 1
=> Tens' digit = 7 * 9 [156**7**1 * 37**9**]
= 3
=> Last two digits = 31

Link to Theory for Units' digit of exponents here.

Hope it helps!