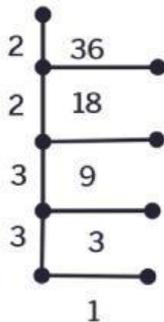# Express the numbers in Exponential Notation

- *Any number can be expressed in the exponential form, by using the **prime factorization method**.*
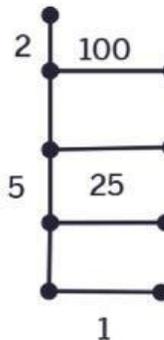- *Prime factorization helps to express any given number as **product of primes***

### 1. Express **36** using the exponential notation

2 | 36
2 | 18
3 | 9
3 | 3
| 1

$36 = 2 \times 2 \times 3 \times 3$

$36 = 2^2 \times 3^2$ → Exponential notation

### 2. Express **100** using the exponential notation

2 | 100
5 | 25
| 1

$100 = 2 \times \quad \times \quad \times 5$

$100 = \blacksquare^2 \times \blacksquare^2$ → Exponential notation
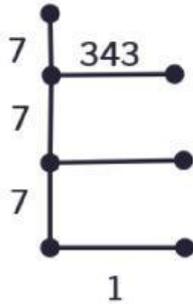
### 3. Express **169** using the exponential notation
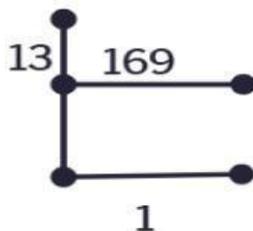
13 | 169
| 1

$169 = \quad \times 13$

$169 = \blacksquare^2$ → Exponential notation

## 4. Express **343** using the exponential notation

$343 = $ ____ x ____ x 7

$343 = \blacksquare^3$ → Exponential notation

## 5. Express **3125** using the exponential notation
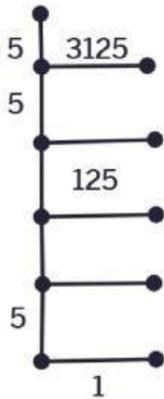
$3125 = $ ____ x ____ x 5 x ____ x 5

$3125 = \blacksquare^5$ → Exponential notation

## 6. Express **2700** using the exponential notation

$2700 = $ ____ x ____ x 5 x ____ x 3 x ____ x 3

$2700 = \blacksquare^2 \ x \ \blacksquare^3 \ x \ \blacksquare^2$ → Exponential notation