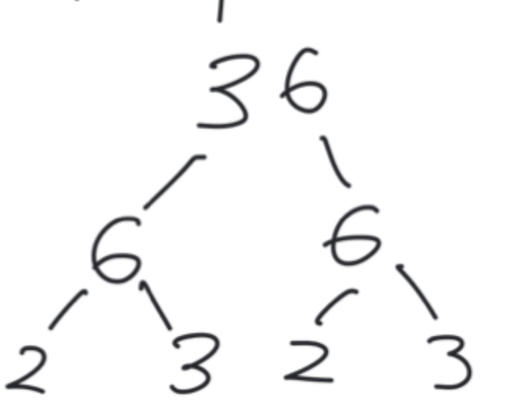
Finding Divisors

Q: How can we find the positive divisors of a natural number n?

Idea: Use the prime factorization of n.

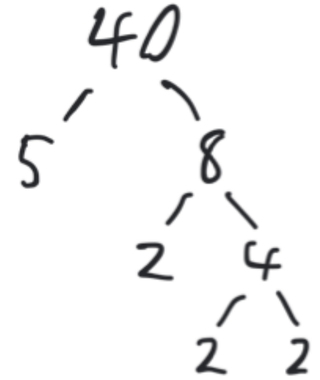
Examples:



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

	×1	×3	×9
×1	1	3	9
×2	2	6	18
×4	4	12	36

$Div(36) \cap \mathbb{N} = \{1, 2, 3, 4, 6, 9, 12, 18, 36\}$



$40 = 2^3 \times 5$

	×1	×5
×1	1	5
×2	2	10
×4	4	20
×8	8	40

$Div(40) \cap \mathbb{N} = \{1, 2, 4, 5, 8, 10, 20, 40\}$