## Prime number



A *prime number* is a positive integer with exactly two positive factors: 1 and itself. For example,

- 2 is prime, as its positive factors are 1 and 2
- ullet 4 is not prime, as its positive factors include 2
- ullet 1 is not prime, as its only positive factor is 1
- 0 is not prime, as it is not a positive integer

Numbers which are not prime are called composite numbers.

Sometimes, the term prime number is used in a wider sense to include negative integers; a negative integer is prime if it is the negative of a (positive) prime number. Zero is neither prime nor composite.