

Exercise 55

Explain in your own words how to find the prime factorization of a composite number.

Solution

Begin by finding one number that divides the composite number to make it smaller. For example, if the composite number is even, 2 is a factor; also, if the digits add to a number that's divisible by 3, then 3 is a factor of the composite number. Write each factor as a product of smaller numbers until they are prime.