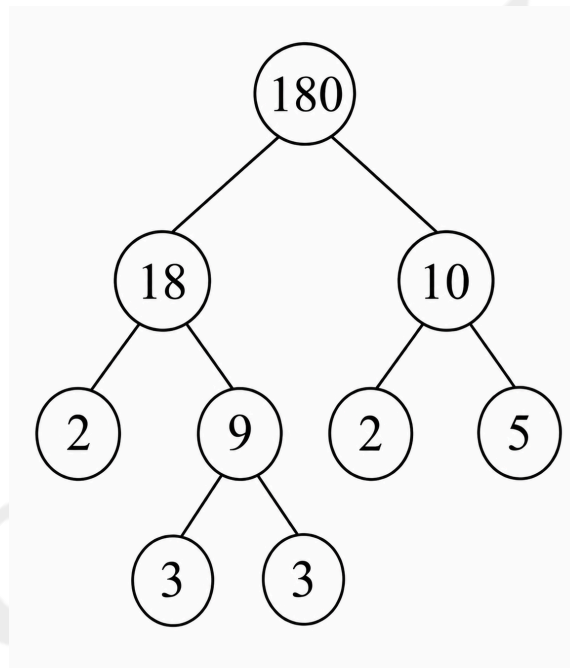


Class 10 Mathematics - Real Numbers

Name: _____

Date: _____

Medium Worksheet 1



Questions

1. Write the prime factorisation of 180 using the factor tree.
2. How many prime factors are present in the factorisation?
3. What is the highest power of 2 in the factorisation?
4. What is the highest power of 3 in the factorisation?
5. State the Fundamental Theorem of Arithmetic.
6. Is the prime factorisation of a composite number unique?

Answer Key

1. $180 = 2^2 \times 3^2 \times 5$
2. 5 prime factors
3. 2^2
4. 3^2
5. Every composite number can be expressed as a product of primes, and this factorisation is unique apart from the order of the prime factors.
6. Yes