## Math 10 Prime Factorization Practice (DO NOT WRITE ON THIS PAPER)

Grasping the concept of prime factorization trees enhances your comprehension of the mathematical topic "entire vs. mixed radicals." Determining the least common multiple (LCM) of two or more numbers simplifies the process of adding and subtracting fractions. Recognizing the greatest common factor (GCF) serves as the initial step in mastering factoring techniques. Visit hunkim.com/10 for more BC Math 10 resources.

- Expressing prime factorization of a number using powers
- Identifying the factors of a number
- Includes greatest common factor (GCF) and least common multiple (LCM)
- Strategies include using factor trees and factor pairs
- 1. Enrichment: List the first four prime numbers
- 2. Can prime numbers be negative?
- 3. Find the prime factorization of 27000
- 4. What are the factors of 12?
- 5. What are the prime factors of 24?
- 6. What are the prime factors of 126?
- 7. Find the GCF and LCM of: a. 10 and 15
  - b. 8, 12, and 20
  - c. 6, 20, and 30
- 8. Find the GCF and LCM of 8x,  $20x^3$ ,  $60x^2$ , 100x
- 9. Find the square root of 900 by finding its prime factorization.
- 10. Find the cube root of 216 by finding its prime factorization.