

Prime Time 3.1

No new vocabulary terms.

Prime Time 3.2

exponent

The small raised number that tells how many times a factor is used. For example, 5^3 means $5 \times 5 \times 5$. The exponent is 3.

factorization

A product of numbers, perhaps with some repetitions, resulting in the desired number. A number can have many factorizations. For example, two factorizations of 60 are 3×20 and $2 \times 2 \times 15$.

prime factorization

A product of prime numbers, perhaps with some repetitions, resulting in the desired number. For example, the prime factorization of 7,007 is $7 \times 7 \times 11 \times 13$. The prime factorization of a number is unique except for the order of the factors.

Prime Time 3.3

relatively prime numbers

A pair of numbers with no common factors except for 1. For example, 20 and 33 are relatively prime because the factors of 20 are 1, 2, 4, 5, 10, and 20, while the factors of 33 are 1, 3, 11, and 33. Notice that neither 20 nor 33 is itself a prime number.

Prime Time 3.4

No new vocabulary terms.

Prime Time 3.5

No new vocabulary terms.