



Vocabulary: Finding Factors with Area Models



Vocabulary

- Composite number – a whole number that has more than two factors.
 - For example, 28 is a composite number because it has six factors: 1, 2, 4, 7, 14, and 28.
- Factor – a whole number that divides another number without a remainder.
 - For example, the factors of 28 are 1, 2, 4, 7, 14, and 28.
 - The factors of a number come in factor pairs, two numbers that multiply to that number.
 - The factor pairs for 28 are 1 and 28, 2 and 14, and 4 and 7.
- Prime number – a number that has two distinct factors, 1 and itself.
 - For example, 17 is a prime number because it has only two factors: 1 and 17.
 - 1 is not a prime number because it only has one factor.
- Prime factorization – the product of all the prime factors for a number.
 - For example, the prime factorization of 90 is $2 \cdot 3 \cdot 3 \cdot 5$, or, using exponents, $2 \cdot 3^2 \cdot 5$.
 - To find the prime factorization of a number, you can use a *factor tree* like the one shown to the right.

