G6 Playlist: Finding Greatest Common Factors and Least Common Multiples

Aligns with *CCSS.MATH.CONTENT.6.NS.B.4:* Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. *For example, express 36 + 8 as 4 (9 + 2).*

Related Standards

- CCSS.MATH.CONTENT.4.OA.B.4: Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.

Objectives

In this playlist, you will learn and practice the following skills:

- Find the greatest common factor of two whole numbers less than 100.

- Find the least common multiple of two whole numbers less than 100.

- Use the distributive property to express the sum of two numbers with a common factor as the product of the common factor and the sum of two numbers that do not have a common factor.

Let's get started!

Key Terms

- A **factor** is a number that divides evenly into another number.

- The **greatest common factor** of two whole numbers is the greatest whole number that divides evenly into both numbers.

- A **prime factor** is a prime number that is a factor of a number.

- The **prime factorization** of a number a multiplication expression whose factors are only prime numbers whose product is the number.

- **Relatively prime numbers** have no common factors other than 1.

- The **distributive property** is a property of numbers that states that the product of a factor and a sum can be written as a sum of two products.

- A **multiple** is a number that can be evenly divided by another number.

- The **least common multiple** of two whole numbers is the least whole number that is evenly divisible by both numbers.