

# Understand Fractions and Simplest Form

A fraction consist of two parts, the number above the dash is called the numerator and the part under the dash is called the denominator

$$\begin{array}{c} \text{Numerator} \\ \frac{4}{7} \rightarrow \text{Dash} \\ \text{Denominator} \end{array}$$

When the numerator and denominator of a fraction have no common factors other than 1, the fraction is in simplest form.

When the numerator and denominator of a fraction have a common factors we use a GCF to write a fraction in simplest form.

What is the simplest form of  $\frac{36}{48}$

**STEP 1:** Find the GCF of 36 and 48

$$36 = 2 \times 2 \times 3 \times 3$$

$$48 = 2 \times 2 \times 2 \times 2 \times 3$$

$$GCF(36, 48) = 12$$

**STEP 2:** Divide the numerator and denominator by the GCF.

$$\text{So, } \frac{36}{48} = \frac{36 \div 12}{48 \div 12} = \frac{3}{4}$$

## Examples:

**A- Write each fraction in simplest form**

$$1) \frac{12}{14}$$

$$\frac{12}{14}$$

$$GCF(12, 14) = 2$$

$$\frac{12}{14} = \frac{12 \div 2}{14 \div 2} = \frac{6}{7}$$

$$2) \frac{24}{40}$$

$$\frac{24}{40}$$

$$GCF(24, 40) = 8$$

$$\frac{24}{40} = \frac{24 \div 8}{40 \div 8} = \frac{3}{5}$$

$$3) \frac{81}{99}$$

$$\frac{81}{99}$$

$$GCF(81, 99) = 9$$

$$\frac{81}{99} = \frac{81 \div 9}{99 \div 9} = \frac{9}{11}$$