Reducing Fractions to Simplest Form

Method 1

$\frac{48}{56}$

1. Ask if the denominator is divisible by the numerator. If it is not divisible, skip Step 2.

$\frac{48}{56}$ = No | $\frac{24}{28}$ = No | $\frac{12}{14}$ = No | $\frac{6}{7}$ = No

2. If the denominator is divisible by the numerator, divide both the numerator and the denominator by the numerator. The fraction is now in simplest form.

3. Determine a common factor of the numerator and the denominator. If there are no common factors, the fraction is in simplest form.

$\frac{48}{56}$ = common factor of 2 | $\frac{24}{28}$ = common factor of 2 | $\frac{12}{14}$ = common factor of 2 | $\frac{6}{7}$ = no common factors = Simplest Form

4. Divide both the numerator and denominator by that factor.

$\frac{48}{56} \div \frac{2}{2} = \frac{24}{28}$ | $\frac{24}{28} \div \frac{2}{2} = \frac{12}{14}$ | $\frac{12}{14} \div \frac{2}{2} = \frac{6}{7}$

5. Return to Step 1 and repeat until the fraction is in simplest form.

Method 2

1. Find the Greatest Common Factor (GCF) of the numerator and denominator.

$\frac{48}{56}$

Factors of 48 = 1, 2, 3, 4, 6, (8), 12, 16, 24, 48

Factors of 56 = 1, 2, 4, 7, (8), 14, 28, 56 | GCF = 8

2. Divide both the numerator and denominator of the fraction by the GCF. The fraction is now in simplest form.

GCF = 8 $\quad \frac{48}{56} \div \frac{8}{8} = \frac{6}{7}$ = simplest form