Learning Objectives:
1. Multiply fractions: proper or improper.
2. Multiply fractions and mixed numbers or whole numbers.
3. Applications with multiplication of fractions.

1. Multiplying Fractions

Multiplying Fractions if \(a\), \(b\), \(c\) and \(d\) represent positive whole numbers, then

\[
\frac{a}{b} \cdot \frac{c}{d} = \frac{a \cdot c}{b \cdot d}
\]

Example 1. Multiply. Write each answer in simplest form.

1. \(\frac{2}{5} \cdot \frac{2}{7}\)

2. \(\frac{7}{3} \cdot \frac{9}{14} \cdot \frac{8}{15}\)

2. Multiplying Fractions and Mixed numbers or Whole Numbers

Multiplying Fractions and Mixed numbers or Whole Numbers— is to write any mixed or whole numbers as fractions and then multiply as usual.

Example 2. Multiply. Write each answer in simplest form.

1. \(\frac{3}{4} \cdot \frac{2}{3}\)

2. \(\frac{7}{10} \times 5\)

3. \(\frac{1}{8} \times 0\)
3. **Solving Problems by Multiplying Fractions**

   **Key words:** “of” translate to “multiplication”

   **Example 3.** Solve. Write each answer in simplest from.

1. Find $\frac{2}{5}$ of 75

2. A tiled wall is built 6 tiles wide. If the side of the square tile measures $2\frac{5}{8}$ inches, what is the width of the wall?