

7.3 Multiplying Mixed Numbers

$$4\frac{2}{7} \cdot 3\frac{3}{5} = \frac{38}{7} \cdot \frac{18}{5} = \frac{76}{5}$$

Mixed number
 ↳ into improper fraction

$$4\frac{2}{7} = \frac{4 \cdot 7 + 2}{7} = \frac{38}{7} \quad 3\frac{3}{5} = \frac{3 \cdot 5 + 3}{5} = \frac{18}{5}$$

$$\frac{76}{5} = 15\frac{1}{5}$$

Improper → Mxd Number

$$\begin{array}{r} 15 \text{ r } 1 \\ 5 \overline{)76} \\ \underline{50} \\ 26 \\ \underline{25} \\ 1 \end{array}$$

$$\begin{array}{l} \frac{3}{4} \times 2\frac{2}{5} \\ \frac{7}{14} \times \frac{8}{3} \\ \frac{7}{1} \times \frac{2}{3} \\ \frac{14}{3} \\ 4\frac{2}{3} \end{array}$$

1. Turn to improper
2. Simplify & multiply
3. multiply
4. Return to mixed number if needed

$$\begin{array}{l} 6\frac{2}{5} \cdot 1\frac{2}{8} \\ \frac{4 \cdot 32}{15} \cdot \frac{2}{8} \\ \frac{4}{1} \cdot \frac{2}{1} = 8 \end{array}$$

$$\begin{array}{l} \frac{2}{3} \times \frac{1}{3} \\ \frac{2}{3} \times \frac{4}{3} \\ \frac{8}{9} \end{array}$$

P 356-357
 4-40 even