## Multiplying Fractions, Mixed \& Whole Numbers:

| Fraction x Fraction: | $\frac{2}{5} \times \frac{1}{3}=\frac{2}{15}$ |
| :--- | :--- | :--- |
| Whole Number x Fraction: | $2 \times \frac{1}{4}=\frac{2}{1} \times \frac{1}{4}=\frac{2}{8}$ |
| Fraction x Whole Number: | $\frac{1}{5} \times 4=\frac{1}{5} \times \frac{4}{1}=\frac{4}{5}$ |
| Mixed Number x Fraction: | $5 \frac{2}{5} \times \frac{1}{6}=\frac{27}{5} \times \frac{1}{6}=\frac{27}{30}$ |
| Fraction x Mixed Number: | $\frac{2}{7} \times 2 \frac{1}{8}=\frac{2}{7} \times \frac{17}{8}=\frac{34}{56}$ |
| Mixed Number x Whole Number: | $1 \frac{2}{7} \times 2=\frac{9}{7} \times \frac{2}{1}=\frac{18}{7}=2 \frac{4}{7}$ |
| Whole Number x Mixed Number: | $5 \times \frac{2}{7}=\frac{5}{1} \times \frac{23}{7}=\frac{115}{7}=16 \frac{6}{7}$ |
| Mixed Number x Mixed Number: | $2 \frac{2}{5} \times \frac{3}{7}=\frac{12}{5} \times \frac{10}{7}=\frac{120}{35}=3 \frac{15}{35}$ |

When multiplying mixed numbers, you need to convert them to improper fractions first.

## Dividing Fractions, Mixed \& Whole Numbers:

| Fraction $\div$ Fraction: | $\frac{2}{5} \div \frac{1}{3}=\frac{2}{5} \times \frac{3}{1}=\frac{6}{5}=1 \frac{1}{5}$ |
| :--- | :--- |
| Whole Number $\div$ Fraction: | $2 \div \frac{1}{4}=\frac{2}{1} \div \frac{1}{4}=\frac{2}{1} \times \frac{4}{1}=\frac{8}{1}=8$ |
| Fraction $\div$ Whole Number: | $\frac{1}{5} \div 4=\frac{1}{5} \div \frac{4}{1}=\frac{1}{5} \times \frac{1}{4}=\frac{1}{9}$ |
| Mixed Number $\div$ Fraction: | $5 \frac{2}{5} \div \frac{1}{6}=\frac{27}{5} \div \frac{1}{6}=\frac{27}{5} \times \frac{6}{1}=\frac{162}{5}=32 \frac{2}{5}$ |
| Fraction $\div$ Mixed Number: | $\frac{2}{7} \div 2 \frac{1}{8}=\frac{2}{7} \div \frac{17}{8}=\frac{2}{7} \times \frac{8}{17}=\frac{16}{119}$ |
| Mixed Number $\div$ Whole Number: | $1 \frac{2}{7} \div 2=\frac{9}{7} \div \frac{2}{1}=\frac{9}{7} \times \frac{1}{2}=\frac{9}{14}$ |
| Whole Number $\div$ Mixed Number: $5 \div 3 \frac{2}{7}=\frac{5}{1} \div \frac{23}{7}=\frac{5}{1} \times \frac{7}{23}=\frac{35}{23}=1 \frac{12}{23}$ |  |
| Mixed Number $\div$ Mixed Number: $2 \frac{2}{5} \div 1 \frac{3}{7}=\frac{12}{5} \div \frac{10}{7}=\frac{12}{5} \times \frac{7}{10}=\frac{84}{50}=1 \frac{34}{50}$ |  |

When dividing mixed numbers, you need to convert them to improper fractions first.

