

Study Guide

Fraction Test

Change mixed numbers to improper fractions and improper fractions to mixed numbers:

Ex: Change $4\frac{7}{11}$ to an improper fraction

$$\frac{51}{11}$$

Ex: Make $\frac{45}{6}$ a mixed number

$$7\frac{6}{12} = 7\frac{1}{2}$$

Add and subtract like fractions:

- Add/subtract numerators
- Keep the denominator

Ex: $\frac{3}{8} - \frac{1}{8}$

$$\frac{1}{4}$$

Ex: $9\frac{3}{4} - 1\frac{1}{4}$

$$8\frac{1}{2}$$

Ex: $2\frac{1}{7} + 8\frac{5}{7}$

$$10\frac{6}{7}$$

Add and subtract unlike fractions:

- Find a common denominator!

Ex: $\frac{5}{12} + \frac{1}{3}$

$$\frac{3}{4}$$

Ex: $14\frac{1}{10} - 6\frac{4}{5}$

$$7\frac{3}{10}$$

Ex: $4\frac{2}{5} + \frac{5}{6}$

$$5\frac{7}{30}$$

Multiply Fractions:

- Simplify diagonally first if possible
- Multiply across

$$\text{Ex: } 4\frac{1}{3} \cdot \frac{9}{52}$$

$$\frac{3}{4}$$

$$\text{Ex: } \frac{3}{8} \cdot \frac{4}{9}$$

$$\frac{1}{6}$$

$$\text{Ex: } 7\frac{1}{5} \cdot 8\frac{1}{3}$$

$$60$$

Divide Fractions:

- Multiply by the reciprocal

$$\text{Ex: } 14\frac{2}{9} \div 10\frac{2}{3}$$

$$1\frac{1}{3}$$

$$\text{Ex: } \frac{3}{5} \div \frac{6}{25}$$

$$2\frac{1}{2}$$

$$\text{Ex: } 9\frac{3}{4} \div 6\frac{1}{2}$$

$$1\frac{1}{2}$$