

Objectives: The students will be able to solve problems by adding & subtracting fractions.

Adding & Subtracting Rational Numbers (specifically fractions)

When adding or subtracting fractions, do NOT change mixed numbers to improper fractions. You MUST get a common denominator. Some of the fractions include negative numbers. Follow your integer rules.



Practice as notes

Simplify.

$$1) \frac{3}{4} + \frac{1}{5} =$$

$$\frac{15}{20} + \frac{4}{20} = \boxed{\frac{19}{20}}$$

$$2) 7\frac{3}{4} - 2\frac{1}{2} =$$

$$7\frac{3}{4} - 2\frac{2}{4} = \boxed{5\frac{1}{4}}$$

$$3) \frac{2}{12} + \frac{3}{4} =$$

$$\frac{2}{12} + \frac{9}{12} = \boxed{\frac{11}{12}}$$

$$4) 4\frac{3}{7} - 1\frac{3}{14} =$$

$$4\frac{6}{14} - 1\frac{3}{14} = \boxed{3\frac{3}{14}}$$

$$5) -2\frac{3}{4} + (-\frac{2}{3}) =$$

$$-2\frac{9}{12} + -\frac{8}{12}$$

$$-2\frac{17}{12} = \boxed{-3\frac{5}{12}}$$

$$6) 4\frac{3}{4} + (-1\frac{1}{5}) =$$

$$4\frac{15}{20} + -1\frac{4}{20}$$

$$\boxed{3\frac{11}{20}}$$

$$7) -6\frac{2}{3} + (+3\frac{2}{5}) =$$

$$-6\frac{10}{15} + 3\frac{6}{15}$$

$$\boxed{-3\frac{4}{15}}$$

$$8) -10\frac{3}{5} + (+3\frac{3}{8}) =$$

$$-10\frac{24}{40} + 3\frac{15}{40}$$

$$\boxed{-7\frac{9}{40}}$$

Evaluate if $a = 1\frac{7}{8}$, $b = -4\frac{1}{2}$ and $c = 5\frac{3}{4}$. Substitution must be shown as a separate step.

9. $a - b + c$

$$1\frac{7}{8} + (+4\frac{1}{2}) + 5\frac{3}{4}$$

$$1\frac{7}{8} + 4\frac{4}{8} + 5\frac{6}{8}$$

$$10\frac{17}{8} = \boxed{12\frac{1}{8}}$$

10. $c - b - a$

$$5\frac{3}{4} + (+4\frac{1}{2}) - 1\frac{7}{8}$$

$$5\frac{6}{8} + 4\frac{4}{8} + -1\frac{7}{8}$$

$$\boxed{8\frac{3}{8}}$$