SUBTRACTING FRACTIONS

ESSENTIAL QUESTION

How do you subtract fractions with unlike denominators?

To subtract fractions the numerators need to be the same. Subtract the numerators and put the difference over the common denominator. $\frac{7}{15} - \frac{2}{15} = \frac{5}{15} = \frac{1}{3}$

Subtract. Write answer in simplest form.

$8\frac{5}{9} - 2\frac{1}{3}$

$8\frac{5}{9} - 2\frac{1\cdot 3}{3\cdot 3}$

$8\frac{5}{9} - 2\frac{3}{9}$

$6\frac{2}{9}$

Subtract. Write answer in simplest form.

$5\frac{1}{5} - 1\frac{1}{7}$

$5\frac{1\cdot 7}{5\cdot 7} - 1\frac{1\cdot 5}{7\cdot 5}$

$5\frac{7}{35} - 1\frac{5}{35}$

$4\frac{2}{35}$

ON YOUR OWN

Subtract. Write answer in simplest form.

$4\frac{3}{4} - 2\frac{3}{10}$

$4\frac{3\cdot 5}{4\cdot 5} - 2\frac{3\cdot 2}{10\cdot 2}$

$4\frac{15}{20} - 2\frac{6}{20}$

$2\frac{9}{20}$

ON YOUR OWN

Subtract. Write answer in simplest form.

$6\frac{5}{7} - 2\frac{1}{5}$

$6\frac{5\cdot5}{7\cdot5} - 2\frac{1\cdot7}{5\cdot7}$

$6\frac{25}{35} - 2\frac{7}{35}$

$4\frac{18}{35}$

ON YOUR OWN

Subtract. Write answer in simplest form.

$\frac{4}{7} - \frac{1}{4}$

$\frac{4\cdot4}{7\cdot4} - \frac{1\cdot7}{4\cdot7}$

$\frac{16}{28} - \frac{7}{28} = \frac{9}{28}$

Subtract. Write answer in simplest form.

$\frac{2}{7} - \frac{1}{8}$

$\frac{2\cdot8}{7\cdot8} - \frac{1\cdot7}{8\cdot7}$

$\frac{16}{56} - \frac{7}{56} = \frac{9}{56}$

ON YOUR OWN

Subtract. Write answer in simplest form.

$10\frac{2}{3} - 2\frac{1}{4}$

$10\frac{2\cdot4}{3\cdot4} - 2\frac{1\cdot3}{4\cdot3}$

$10\frac{8}{12} - 2\frac{3}{12}$

$7\frac{5}{12}$

Subtract. Write answer in simplest form.

$\frac{15}{24} - \frac{7}{12}$

$\frac{15}{24} - \frac{7\cdot2}{12\cdot2}$

$\frac{15}{24} - \frac{14}{24} = \frac{1}{24}$

You have $3\frac{3}{4}$ pounds of taffy. You eat $1\frac{1}{3}$ pound of taffy. How many pounds of taffy do you have left?

$3\frac{3}{4} - 1\frac{1}{3}$

$3\frac{3\cdot3}{4\cdot3} - 1\frac{1\cdot4}{3\cdot4}$

$3\frac{9}{12} - 1\frac{4}{12} = 2\frac{5}{12}$

You have $2\frac{5}{12}$ pounds of taffy left.

STEPS FOR SUBTRACTING FRACTIONS WITH UNLIKE DENOMINATORS

1)Find the Lowest Common Denominator (LCD) of the fractions or (LCM) Least Common Denominator.

2) Rewrite fractions as equivalent fractions by multiplying the numerator and denominator of each fraction by a number so that they have the LCM as their new denominator.

3)Subtract the numerators and keep the denominator the same. If there are whole numbers, subtract them.

4)Simplify the fractions, if necessary, by dividing the numerator and denominator by the GCF.