

Calculer avec des fractions

1. Sommes et différences

$A = \frac{1}{2} + \frac{3}{2}$	$D = \frac{-12}{7} + \frac{5}{14}$	$G = \frac{8}{35} + \frac{6}{15}$
$B = \frac{-2}{3} + \frac{5}{3}$	$E = \frac{-3}{5} - \frac{4}{15}$	$H = \frac{23}{26} - \frac{12}{39}$
$C = \frac{5}{12} - \frac{1}{6}$	$D = \frac{1}{6} + \frac{1}{7}$	$I = \frac{1}{a} + \frac{1}{2a}$

2. Multiplications

$A = \frac{1}{5} \times 3$	$D = \frac{24}{35} \times \frac{14}{36}$	$G = \frac{-2}{3} \times \frac{-15}{7} \times \frac{21}{-20}$
$B = \frac{-2}{5} \times 3$	$E = \frac{-64}{30} \times \frac{60}{-4}$	$H = \frac{256}{-7} \times \frac{7}{-256}$
$C = \frac{1}{2} \times \frac{4}{3}$	$F = \frac{10}{15} \times \frac{7}{20}$	$I = \frac{-8}{3} \times \frac{-3}{5} \times \frac{1}{64}$

3. Simplifications (mettre sous la forme d'une fraction irréductible)

$A = \frac{3}{30}$	$E = \frac{-12}{18}$	$I = \frac{2,5}{3}$
$B = \frac{3}{9}$	$F = \frac{24}{30}$	$J = \frac{-2,4}{-3}$
$C = \frac{-4}{12}$	$G = \frac{77}{-99}$	$K = \frac{-2,4}{2,5}$
$D = \frac{-400}{-1200}$	$H = \frac{15}{55}$	$L = \frac{2,5}{-2,4}$

4. Comparisons (\leq , \geq ou $=$?)

a. $\frac{1}{3}$ <i>et</i> $\frac{2}{3}$	c. $\frac{8}{5}$ <i>et</i> $\frac{6}{15}$	e. $\frac{8}{35}$ <i>et</i> $\frac{6}{15}$
b. $-\frac{3}{4}$ <i>et</i> $\frac{1}{4}$	d. $\frac{1}{10}$ <i>et</i> $\frac{3}{100}$	f. $\frac{7}{84}$ <i>et</i> $\frac{9}{108}$

5. Divisions

$A = \frac{-4}{15} \div \frac{16}{15}$	$C = \frac{\frac{15}{4}}{\frac{21}{16}}$	$E = \frac{\frac{21}{-24}}{\frac{14}{32}}$
$B = \frac{-5}{6} \div \frac{-15}{18}$	$D = \frac{\frac{45}{18}}{12}$	$F = \frac{1}{\frac{1}{6}}$

6. Calculs

$A = \frac{5}{4} - \frac{7}{4} \times \frac{1}{14}$	$E = \left(\frac{8}{15} - \frac{7}{5}\right) \times \left(\frac{-1}{6} + \frac{2}{9}\right)$	$I = \frac{\frac{5}{6} - \frac{5}{4}}{\frac{1}{2} + \frac{2}{3}}$
$B = \frac{5}{4} \div \left(\frac{2}{3} - \frac{5}{2}\right)$	$F = \frac{2}{3} - \frac{\frac{7}{3} \times 8}{21}$	$J = \frac{\left(\frac{5}{6} - \frac{5}{4}\right) \times \frac{2}{3}}{\left(\frac{1}{2} + \frac{2}{3}\right) \times \frac{1}{2}}$
$C = \left(\frac{11}{7} - \frac{1}{5}\right) \times \frac{-25}{8}$	$G = \frac{\left(\frac{3}{4} - \frac{5}{6}\right) \times 3}{2}$	$K = \frac{\left(1 - \frac{1}{3}\right)\left(1 - \frac{2}{3}\right)\left(1 - \frac{3}{3}\right)}{\frac{14}{32}}$
$D = \frac{-2}{21} \times \frac{14}{5} - \frac{8}{5}$	$H = \frac{\left(\frac{-24}{15} + \frac{-35}{25}\right) \times 20}{33}$	$L = \frac{35}{36} \times \frac{\left(\frac{3}{2} - \frac{2}{3}\right) \times \frac{5}{4}}{\left(\frac{3}{2} - \frac{2}{3}\right) \times \frac{5}{4}}$