

Adding and subtracting fractions

Show all steps. Re-write every subtraction problem as addition problems.

<p>1) $\left(-\frac{4}{5}\right) - \frac{7}{8}$</p> <p>① Equivalent Fractions</p> $\frac{-4}{5} \times \frac{8}{8} = \frac{-32}{40}$ $\frac{-7}{8} \times \frac{5}{5} = \frac{-35}{40}$	<p>② Rewrite as addition</p> $\frac{-32}{40} + \frac{-35}{40}$ <p>③ Add absolute value and put a negative sign on answer</p> $\frac{32}{40} + \frac{35}{40} = \frac{67}{40} = 1\frac{27}{40}$ $\boxed{-1\frac{27}{40}}$	<p>2) $\frac{1}{3} - \left(-\frac{5}{3}\right)$</p> <p>① Equivalent Fraction</p> $\frac{1}{3} - \left(-\frac{5}{3}\right)$	<p>② Rewrite as addition</p> $\frac{1}{3} + \frac{5}{3}$ <p>③ Add normally</p> $\frac{1}{3} + \frac{5}{3} = \frac{6}{3} = \boxed{2}$
<p>3) $\left(-\frac{1}{3}\right) + \frac{3}{8}$</p> <p>① Equivalent Fractions</p> $\left(-\frac{1}{3}\right) \times \frac{8}{8} = \frac{-8}{24}$ $\frac{3}{8} \times \frac{3}{3} = \frac{9}{24}$	<p>② Find difference between absolute values</p> $\frac{9}{24} - \frac{8}{24} = \frac{1}{24}$ <p>③ Find sign of larger absolute value</p> $\boxed{\frac{1}{24}}$	<p>4) $\left(-\frac{10}{7}\right) + \frac{1}{6}$</p> <p>① Equivalent Fractions</p> $\left(-\frac{10}{7}\right) \times \frac{6}{6} = \frac{-60}{42}$ $\left(\frac{1}{6}\right) \times \frac{7}{7} = \frac{7}{42}$	<p>② Find difference between absolute values</p> $\frac{60}{42} - \frac{7}{42} = \frac{53}{42} = 1\frac{11}{42}$ <p>③ Find sign of larger absolute value</p> $\boxed{-1\frac{11}{42}}$
<p>5) $\frac{9}{5} + \left(-\frac{4}{3}\right)$</p> <p>① Equivalent Fractions</p> $\left(\frac{9}{5}\right) \times \frac{3}{3} = \frac{27}{15}$ $\left(-\frac{4}{3}\right) \times \frac{5}{5} = \frac{-20}{15}$	<p>② Find difference between absolute values</p> $\frac{27}{15} - \frac{20}{15} = \frac{7}{15}$ <p>③ Find sign of larger absolute value</p> $\boxed{\frac{7}{15}}$	<p>6) $2 - \frac{13}{8}$</p> <p>① Equivalent fractions</p> $\frac{2}{1} \times \frac{8}{8} = \frac{16}{8}$ $\frac{13}{8} \rightarrow \frac{13}{8}$	<p>② Rewrite as addition</p> $\frac{16}{8} + \frac{-13}{8}$ <p>③ Find difference of absolute values</p> $\frac{16}{8} - \frac{13}{8} = \frac{3}{8}$ <p>④ Find sign of larger absolute value</p> $\boxed{\frac{3}{8}}$
<p>7) $\frac{9}{5} - \frac{5}{8}$</p> <p>① Equivalent Fractions</p> $\left(\frac{9}{5}\right) \times \frac{8}{8} = \frac{72}{40}$ $\left(\frac{5}{8}\right) \times \frac{5}{5} = \frac{25}{40}$	<p>② Rewrite as addition</p> $\frac{72}{40} + \frac{-25}{40}$ <p>③ Find difference of absolute values</p> $\frac{72}{40} - \frac{25}{40} = \frac{47}{40} = 1\frac{7}{40}$ <p>④ Find sign of larger absolute value</p> $\boxed{1\frac{7}{40}}$	<p>8) $\left(-\frac{4}{3}\right) - \left(-\frac{3}{2}\right)$</p> <p>① Equivalent Fractions</p> $\left(-\frac{4}{3}\right) \times \frac{2}{2} = \frac{-8}{6}$ $\left(-\frac{3}{2}\right) \times \frac{3}{3} = \frac{-9}{6}$	<p>② Rewrite as addition</p> $\frac{-8}{6} + \frac{9}{6}$ <p>③ Find difference of absolute values</p> $\frac{9}{6} - \frac{8}{6} = \frac{1}{6}$ <p>④ Find sign of larger absolute value</p> $\boxed{\frac{1}{6}}$
<p>9) $-\frac{6}{9} + \left(-\frac{2}{3}\right)$</p> <p>① Equivalent Fractions</p> $\left(-\frac{6}{9}\right) \rightarrow \frac{-6}{9}$ $\left(-\frac{2}{3}\right) \times \frac{3}{3} = \frac{-6}{9}$	<p>② Add the two absolute values</p> $\frac{6}{9} + \frac{6}{9} = \frac{12}{9}$ $= 1\frac{3}{9} = \frac{1}{3}$ <p>③ Place a negative sign on the answer</p> $\boxed{-\frac{1}{3}}$	<p>10) $-\frac{4}{5} - \left(\frac{3}{7}\right)$</p> <p>Equivalent Fractions</p> $\left(-\frac{4}{5}\right) \times \frac{7}{7} = \frac{-28}{35}$ $\left(\frac{3}{7}\right) \times \frac{5}{5} = \frac{15}{35}$	<p>② Rewrite as addition</p> $\frac{-28}{35} + \frac{-15}{35}$ <p>③ Add absolute values</p> $\frac{28}{35} + \frac{15}{35} = \frac{43}{35} = 1\frac{8}{35}$ <p>④ Place negative sign on answer</p> $\boxed{-1\frac{8}{35}}$