Fractions Proof

(a) Show that $\frac{3}{4} \div \frac{15}{16} = \frac{4}{5}$

(b) Show that $\frac{23}{24} - \frac{3}{8} = \frac{7}{12}$

(c) Show that $\frac{5}{8} \div \frac{7}{12} = 1\frac{1}{14}$

(d) Show that $\frac{3}{4} + \frac{4}{5} = 1\frac{11}{20}$

(a) $\frac{3}{4} \times \frac{16}{15} = \frac{48}{60} = \frac{4}{5}$

(b) $\frac{23}{24} - \frac{9}{24} = \frac{14}{24} = \frac{7}{12}$

(c) $\frac{5}{8} \times \frac{12}{7} = \frac{60}{56} = \frac{15}{14} = 1\frac{1}{14}$

(d) $\frac{15}{20} + \frac{16}{20} = \frac{31}{20} = 1\frac{11}{20}$

(a) Show that $1\frac{1}{2} \div 1\frac{1}{4} = 1\frac{1}{5}$

(b) Show that $2\frac{1}{4} \div 3\frac{1}{2} = \frac{9}{14}$

(c) Show that $2\frac{5}{8} \div 1\frac{1}{6} = 2\frac{1}{4}$

(d) Show that $3\frac{1}{2} \times 2\frac{2}{3} = 9\frac{1}{3}$

(e) Show that $4\frac{2}{3} \div 3\frac{5}{9} = 1\frac{5}{16}$

(a) $\frac{3}{2} \div \frac{5}{4} = \frac{3}{2} \times \frac{4}{5} = \frac{12}{10} = \frac{6}{5} = 1\frac{1}{5}$

(b) $\frac{9}{4} \div \frac{7}{2} = \frac{9}{4} \times \frac{2}{7} = \frac{18}{28} = \frac{9}{14}$

(c) $\frac{21}{8} \div \frac{7}{6} = \frac{21}{8} \times \frac{6}{7} = \frac{126}{56} = \frac{18}{8} = \frac{9}{4} = 2\frac{1}{4}$

(d) $\frac{7}{2} \times \frac{8}{3} = \frac{56}{6} = \frac{28}{3} = 9\frac{1}{3}$

(e) $\frac{14}{3} \div \frac{32}{9} = \frac{14}{3} \times \frac{9}{32} = \frac{126}{96} = \frac{21}{16} = 1\frac{5}{16}$

(a) Show that $\frac{5}{9} + \frac{1}{6} = \frac{13}{18}$

(b) Show that $\frac{7}{8} - \frac{5}{6} = \frac{1}{24}$

(c) Show that $1\frac{2}{3} + 2\frac{3}{4} = 4\frac{5}{12}$

(d) Show that $5\frac{1}{4} - 1\frac{2}{3} = 3\frac{7}{12}$

(e) Show that $7\frac{1}{2} - 4\frac{2}{3} = 2\frac{5}{6}$

(a) $\frac{10}{18} + \frac{3}{18} = \frac{13}{18}$

(b) $\frac{21}{24} - \frac{20}{24} = \frac{1}{24}$

(c) $\frac{5}{3} + \frac{11}{4} = \frac{20}{12} + \frac{33}{12} = \frac{53}{12} = 4\frac{5}{12}$

(d) $\frac{21}{4} - \frac{5}{3} = \frac{63}{12} - \frac{20}{12} = \frac{43}{12} = 3\frac{7}{12}$

(e) $\frac{15}{2} - \frac{14}{3} = \frac{45}{6} - \frac{28}{6} = \frac{17}{6} = 2\frac{5}{6}$

(a) Show that $2\frac{1}{3} \times \frac{5}{6} \times \frac{9}{10} = 1\frac{3}{4}$

(b) Show that $2\frac{2}{3} - 1\frac{1}{4} \div 1\frac{1}{8} = 1\frac{5}{9}$

(a) $\frac{7}{3} \times \frac{5}{6} = \frac{35}{18}$

$\frac{35}{18} \times \frac{9}{10} = \frac{315}{180} = \frac{7}{4} = 1\frac{3}{4}$

(b) $\frac{5}{4} \div \frac{9}{8} = \frac{5}{4} \times \frac{8}{9} = \frac{40}{36} = \frac{10}{9}$

$2\frac{2}{3} - \frac{10}{9} = \frac{8}{3} - \frac{10}{9} = \frac{72}{27} - \frac{30}{27} = \frac{42}{27}$

$= \frac{14}{9} = 1\frac{5}{9}$