

$\frac{1}{2} \rightarrow N$
 $\frac{2}{2} \rightarrow D$

$\Rightarrow \frac{3}{1}, \frac{7}{9}, \frac{9}{14}, 3\frac{4}{7}, 0.5 = \frac{0.5}{1} = \frac{5}{10} = \frac{1}{2}$

✓ 1) Pure fraction $\Rightarrow \frac{1}{2}, \frac{3}{4}, \frac{7}{9}, \frac{11}{15}, \frac{17}{19}$ $\left\{ \begin{array}{l} 0.333333... \\ \Rightarrow \frac{1}{3} \end{array} \right.$
N < D $\frac{N}{D}$

2) Mixed fraction $\Rightarrow 13\frac{1}{2}, 17\frac{5}{6}, 19\frac{8}{17}, 5\frac{1}{3}$
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 $\Rightarrow \frac{27}{2}, \frac{107}{6}, \frac{331}{17}, \frac{16}{3}$
 $N > D$

Mixed

Pure

$$17\frac{2}{3} \xrightarrow{(17 \times 3) + 2} \frac{53}{3}$$

$$15\frac{1}{8} \longrightarrow \frac{121}{8}$$

$$13\frac{2}{5} \longrightarrow \frac{67}{5}$$

$$18\frac{3}{4} \longrightarrow \frac{75}{4}$$

$$7\frac{9}{13} \longrightarrow \frac{100}{13}$$

$$12\frac{5}{13} \longrightarrow \frac{161}{13}$$

Pure

Mixed

$$\frac{13}{2} \longrightarrow 6\frac{1}{2}$$

$$\frac{17}{5} \longrightarrow 3\frac{2}{5}$$

$$\frac{87}{13} \longrightarrow 6\frac{9}{13}$$

$$\frac{85}{12} \longrightarrow 7\frac{1}{12}$$

$$\frac{113}{17} \longrightarrow 6\frac{11}{17}$$

$$\Rightarrow \frac{1}{2} \xrightarrow{\times 10} \frac{10}{20} \xrightarrow{\times 2} \frac{20}{40} \xrightarrow{\times 4} \frac{80}{160} \xrightarrow{\div 2} \frac{40}{80} \xrightarrow{\div 4} \frac{10}{20} \xrightarrow{\div 2} \frac{5}{10} \xrightarrow{\div 5} \frac{1}{2}$$

Multiplication & Division

$$1) \frac{7}{9} \times \frac{3}{4} = \frac{7 \times 3}{9 \times 4} = \frac{7}{12}$$

$$2) \frac{5}{6} \times \frac{7}{8} = \frac{35}{48} \quad \frac{(\frac{1}{2})}{(\frac{3}{4})}$$

$$3) \frac{8}{9} \times \frac{15}{16} = \frac{5}{6}$$

$$4) \frac{3}{4} \times \frac{2}{3} \times \frac{8}{15} = \frac{4}{15}$$

$$5) \frac{1}{2} \div \frac{3}{4} = \frac{1}{2} \times \frac{4}{3} = \frac{2}{3}$$

$$6) \frac{4}{5} \div \frac{1}{6} \div \frac{3}{4} = \frac{4}{5} \times \frac{6}{1} \times \frac{4}{3} \Rightarrow \frac{32}{5} = 6\frac{2}{5}$$

$$7) \frac{1}{3} \div \frac{1}{4} \times \frac{2}{5} = \frac{1}{3} \times \frac{4}{1} \times \frac{2}{5}$$

$$8) \frac{6}{7} \times \frac{5}{8} \div \frac{3}{16} = \frac{6}{7} \times \frac{5}{8} \times \frac{16}{3} = \frac{20}{7}$$

$$1) 2\frac{2}{3} \times 1\frac{1}{5} = \frac{8}{3} \times \frac{6}{5} = \frac{16}{5} = \left(3\frac{1}{5}\right)$$

$$2) 4\frac{2}{3} \div 5\frac{1}{6} = \frac{14}{3} \div \frac{31}{6} = \frac{14}{3} \times \frac{6}{31} = \boxed{\frac{28}{31}}$$

$$3) 7\frac{1}{2} \times 3\frac{1}{4} \div 5\frac{1}{6} = \frac{15}{2} \times \frac{13}{4} \div \frac{31}{6}$$

$$\frac{15}{2} \times \frac{13}{4} \times \frac{6}{31} = \frac{585}{124} = \boxed{4\frac{89}{124}}$$

$$124 \times 4 = 496$$

$$\begin{array}{r} 585 \\ - 496 \\ \hline 089 \end{array}$$

$$1) \frac{3}{4} \times \frac{7}{9}$$

$$2) \frac{5}{6} \times \frac{8}{7}$$

$$3) \frac{5}{11} \times \frac{17}{15} \times \frac{18}{25}$$

$$4) \frac{11}{13} \times \frac{117}{120} \times \frac{45}{77}$$

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

$$6) 9\frac{2}{3} \times 8\frac{1}{5}$$

$$7) 5\frac{2}{3} \times 7\frac{1}{3}$$

$$8) \frac{3}{4} \div \frac{5}{6}$$

$$9) \frac{8}{9} \div \frac{7}{5}$$

$$10) \frac{9}{17} \div \frac{5}{4} \div \frac{3}{4}$$

$$11) 7\frac{1}{2} \div 5\frac{1}{3}$$

$$12) 10\frac{1}{2} \div 5\frac{2}{3}$$

$$13) 17\frac{2}{5} \div 1\frac{1}{4}$$

$$14) 1\frac{1}{6} \times 3\frac{3}{4} \div 2\frac{1}{5}$$

$$15) 1\frac{1}{2} \div 3\frac{3}{4} \times \frac{2}{5} \div 1\frac{1}{4}$$