

Multiplying Fractions KEY

Find the simplified solution to the fraction questions below.

a) $\frac{1}{6} \times \frac{1}{5} = \frac{1}{30}$

b) $\frac{1}{3} \times \frac{8}{9} = \frac{8}{27}$

c) $3\frac{1}{3} \times \frac{1}{5} = \frac{10}{3} \times \frac{1}{5} = \frac{2 \cancel{10}}{3} \times \frac{1}{\cancel{5}_1} = \frac{2}{3}$

d) $1\frac{6}{8} \times \frac{7}{9} = \frac{14}{8} \times \frac{7}{9} = \frac{7 \cancel{14}}{4 \cancel{8}} \times \frac{7}{9} = \frac{49}{36} = 1\frac{13}{36}$

e) $1\frac{1}{5} \times 1\frac{5}{7} = \frac{6}{5} \times \frac{12}{7} = \frac{72}{35} = 2\frac{2}{35}$

f) $3\frac{3}{4} \times 1\frac{6}{8} = \frac{15}{4} \times \frac{14}{8} = \frac{15}{4} \times \frac{7}{4} = \frac{105}{16} = 6\frac{9}{16}$

g) $2 \times \frac{2}{7} = \frac{2}{1} \times \frac{2}{7} = \frac{4}{7}$

h) $4 \times \frac{5}{8} = \frac{4}{1} \times \frac{5}{8} = \frac{1 \cancel{4}}{1} \times \frac{5}{\cancel{8}_2} = \frac{5}{2} = 2\frac{1}{2}$

i) $2 \times \frac{6}{18} = \frac{2}{1} \times \frac{6}{18} = \frac{2}{1} \times \frac{\cancel{6}^1}{\cancel{18}_3} = \frac{2}{3}$

j) $6 \times \frac{13}{16} = \frac{6}{1} \times \frac{13}{16} = \frac{\cancel{6}^3}{1} \times \frac{13}{\cancel{16}_8} = \frac{39}{8} = 4\frac{7}{8}$

k) $3\frac{6}{21} \times 4\frac{16}{18} = \frac{69}{21} \times \frac{88}{18} = \frac{\cancel{23}^3 \cancel{69}}{\cancel{7}^3 \cancel{21}} \times \frac{88}{18} =$

$\frac{23}{7} \times \frac{\cancel{88}^{44}}{\cancel{18}_9} = \frac{23}{7} \times \frac{44}{9} = \frac{1012}{63} = 16\frac{4}{63}$

l) $2\frac{25}{40} \times 5\frac{40}{45} = 2\frac{\cancel{25}^5}{\cancel{40}_8} \times 5\frac{\cancel{40}^8}{\cancel{45}_9} = \frac{21}{8} \times \frac{53}{9} =$

$\frac{\cancel{7}^7 \cancel{21}}{8} \times \frac{53}{9} = \frac{371}{72} = 5\frac{11}{24}$