

Study this example

$\frac{7}{11} \times 2\frac{4}{9}$	← First, we must always convert any mixed numbers into improper fractions.
$= \frac{7}{11} \times \frac{22}{9}$	← The whole number times the denominator plus the numerator: $2 \times 9 + 4 = 22$.
$= \frac{7}{1} \times \frac{2}{9}$	← Always simplify top and bottom <i>before</i> multiplying. In this example, $\frac{22}{11} = \frac{2}{1}$.
$= \frac{14}{9}$	← Just multiply the numerators and denominators separately.
$= 1\frac{5}{9}$	← The question had a mixed number, so the answer should be in the same style.

Q1 Simple questions with no mixed numbers. Always simplify before multiplying, if possible.

a) $\frac{1}{2} \times \frac{3}{4}$

b) $\frac{2}{7} \times \frac{1}{2}$

c) $\frac{3}{4} \times \frac{4}{9}$

d) $\frac{2}{5} \times \frac{3}{4}$

e) $\frac{1}{6} \times \frac{3}{4}$

f) $\frac{2}{9} \times \frac{3}{8}$

Q2 These questions involve larger numbers, so take care to simplify fully before multiplying.

a) $\frac{18}{25} \times \frac{10}{27}$

b) $\frac{16}{21} \times \frac{3}{32}$

c) $\frac{72}{121} \times \frac{55}{96}$

d) $\frac{25}{44} \times \frac{132}{175}$

e) $\frac{49}{64} \times \frac{16}{63}$

f) $\frac{48}{49} \times \frac{77}{108}$

Q3 These questions involve mixed numbers. Answers should be given as mixed numbers.

a) $1\frac{1}{2} \times \frac{3}{4}$

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

c) $2\frac{1}{4} \times \frac{5}{6}$

d) $1\frac{1}{4} \times 2\frac{2}{5}$

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

f) $1\frac{3}{5} \times 4\frac{1}{6}$

Q4 Various question types.

a) $\frac{3}{8} \times \frac{2}{9}$

b) $\frac{4}{7} \times 1\frac{5}{9}$

c) $3\frac{1}{2} \times \frac{7}{10}$

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

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

f) $\frac{42}{55} \times 3\frac{2}{3}$

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

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

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

j) $2\frac{14}{25} \times 2\frac{11}{32}$

k) $4\frac{4}{9} \times 2\frac{7}{10}$

l) $1\frac{17}{25} \times 1\frac{37}{63}$