

a) Multiplying a fraction by a whole number:

*What you write*

*Explanation*

$$\begin{aligned} & \frac{3}{8} \times 5 \\ &= \frac{3}{8} \times \frac{5}{1} \\ &= \frac{15}{8} \\ &= 1\frac{7}{8} \end{aligned}$$

Make the whole number an improper fraction by writing it over 1

Multiply numerator by numerator  
& denominator by denominator

Make an improper fraction into a mixed number

b) Multiplying a fraction by a fraction:

Again: numerator x numerator  
denominator x denominator

eg. a)  $\frac{3}{8} \times \frac{5}{7} = \frac{15}{56}$

b) You can cancel:

$$\begin{array}{c} 1 \quad 4 \\ \cancel{3} \quad \cancel{20} \\ \frac{5}{\cancel{8}} \times \frac{\cancel{20}}{\cancel{21}} \\ 1 \quad 7 \\ = \frac{4}{7} \end{array}$$

One numerator with one denominator

c) Multiplying a number or a fraction by a mixed number:

e.g. a)  $2\frac{1}{2} \times 4$

$$= \frac{5}{2} \times \frac{4}{1}$$

$$= 10$$

b)  $2\frac{1}{2} \times \frac{2}{14}$

$$= \frac{5}{2} \times \frac{2}{14}$$

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