

Fraction Action!

Multiplying Mixed Numbers with Whole Numbers

To multiply a mixed number with a whole number, follow these steps:

Example: $4 \times 1 \frac{2}{3}$ ← *numerator*
 3 ← *denominator*

- Take the mixed number and multiply the whole number by the denominator. Then add the product to the numerator. Write the answer on top of the denominator.

$$\begin{array}{c} \textcircled{1} \frac{2}{\textcircled{3}} \\ \times \\ \text{multiply} \end{array} \quad \text{Then} \quad \begin{array}{c} \textcircled{3} + \frac{2}{\textcircled{3}} \\ \text{add} \\ \text{the result} \end{array} \begin{array}{c} \leftarrow \text{The numerator} \\ \leftarrow \text{The denominator} \end{array} = \frac{5}{3}$$

- Write the whole number as a fraction by putting 1 as the denominator.

$$4 = \frac{4}{1} \begin{array}{c} \leftarrow \text{numerator} \\ \leftarrow \text{denominator} \end{array}$$

- Now we change $4 \times 1 \frac{2}{3}$ to $\frac{4}{1} \times \frac{5}{3}$

- Multiply a fraction with a fraction by multiplying the numerator with the numerator and the denominator with the denominator.

$$\frac{4}{1} \times \frac{5}{3} = \frac{4 \times 5}{1 \times 3} = \frac{20}{3}$$

Change the fractions and whole numbers below to improper fractions.

$$4 \frac{3}{5} =$$

$$20 =$$

$$2 \frac{4}{7} =$$

$$35 =$$

Multiply the fractions below. Show your work.

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

$$3 \times 3 \frac{1}{8}$$