

Multiplying Mixed Numbers by Fractions

You can multiply a mixed number by a fraction. Start by writing the mixed number as an improper fraction to make the multiplication easier. Then, multiply. Let's try it! Solve $1\frac{3}{4} \times \frac{3}{5}$.

First, write the mixed number as an improper fraction.

$$1\frac{3}{4} = \frac{7}{4}$$

Next, multiply the numerators, and then multiply the denominators. Make sure your answer is in simplest form. To simplify an improper fraction, you can rewrite it as a mixed number.

$$\frac{7}{4} \times \frac{3}{5} = \frac{7 \times 3}{4 \times 5} = \frac{21}{20} = 1\frac{1}{20}$$



Try it yourself! Multiply. Show your work and write your final answer in simplest form.

$4\frac{1}{2} \times \frac{1}{3} =$	$\frac{9}{2} \times \frac{1}{3} = \frac{9}{6} = 1\frac{1}{2}$	$\frac{1}{4} \times 4\frac{4}{5} =$	$\frac{1}{4} \times \frac{24}{5} = \frac{24}{20} = 1\frac{1}{5}$
$3\frac{1}{3} \times \frac{4}{5} =$	$\frac{10}{3} \times \frac{4}{5} = \frac{40}{15} = 2\frac{2}{3}$	$5\frac{1}{2} \times \frac{3}{4} =$	$\frac{11}{2} \times \frac{3}{4} = \frac{33}{8} = 4\frac{1}{8}$
$\frac{5}{8} \times 2\frac{2}{3} =$	$\frac{5}{8} \times \frac{8}{3} = \frac{40}{24} = 1\frac{2}{3}$	$2\frac{4}{9} \times \frac{3}{5} =$	$\frac{22}{9} \times \frac{3}{5} = \frac{66}{45} = 1\frac{7}{15}$
$\frac{3}{4} \times 1\frac{5}{6} =$	$\frac{3}{4} \times \frac{11}{6} = \frac{33}{24} = 1\frac{3}{8}$	$\frac{5}{12} \times 6\frac{2}{5} =$	$\frac{5}{12} \times \frac{32}{5} = \frac{160}{60} = 2\frac{2}{3}$