



# DIVIDING MIXED FRACTIONS SHEET 1

To divide mixed fractions, follow these three simple steps:

- Convert the mixed fractions into improper fractions
- Invert the divisor fraction (swap the numerator and denominator of the second fraction) and change the division operator to a multiplication operator.  
Note – if the divisor is an integer (Example 2), re-write it as a fraction with a denominator of 1, then invert it.
- Multiply the two fractions together.

$$\text{Example 1} \quad 2 \frac{3}{4} \div 1 \frac{2}{5} = \frac{11}{4} \div \frac{7}{5} = \frac{11}{4} \times \frac{5}{7} = \frac{55}{28}$$

$$\text{Example 2} \quad 1 \frac{2}{5} \div 4 = \frac{7}{5} \div \frac{4}{1} = \frac{7}{5} \times \frac{1}{4} = \frac{7}{20}$$

Work out these fraction divisions. Your answer can be left as an improper fraction and does not need to be in simplest form.

These questions all involve dividing mixed numbers by proper fractions or integers.

$$1) \quad 1 \frac{1}{3} \div \frac{1}{2} = \frac{4}{3} \div \frac{1}{2} = \frac{4}{3} \times \frac{2}{1} = \frac{\quad}{3}$$

$$2) \quad 2 \frac{3}{5} \div 3 = \frac{12}{5} \div \frac{3}{1} = \frac{\quad}{5} \times \frac{\quad}{3} = \frac{\quad}{15}$$

$$3) \quad 4 \frac{1}{2} \div \frac{2}{5} = \frac{\quad}{2} \div \frac{2}{5} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

$$4) \quad 2 \frac{4}{5} \div \frac{1}{3} = \frac{\quad}{\quad} \div \frac{1}{3} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

$$5) \quad 1 \frac{1}{4} \div \frac{2}{7} = \frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

$$6) \quad 3 \frac{2}{3} \div \frac{3}{5} = \frac{\quad}{\quad} \div \frac{\quad}{\quad} = \frac{\quad}{\quad} \times \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

Name

Date



## DIVIDING MIXED FRACTIONS SHEET 1 ANSWERS

$$1) \quad 1 \frac{1}{3} \div \frac{1}{2} = \frac{4}{3} \div \frac{1}{2} = \frac{4}{3} \times \frac{2}{1} = \frac{8}{3}$$

$$2) \quad 2 \frac{3}{5} \div 3 = \frac{13}{5} \div \frac{3}{1} = \frac{13}{5} \times \frac{1}{3} = \frac{13}{15}$$

$$3) \quad 4 \frac{1}{2} \div \frac{2}{5} = \frac{9}{2} \div \frac{2}{5} = \frac{9}{2} \times \frac{5}{2} = \frac{45}{4}$$

$$4) \quad 2 \frac{4}{5} \div \frac{1}{3} = \frac{14}{5} \div \frac{1}{3} = \frac{14}{5} \times \frac{3}{1} = \frac{42}{5}$$

$$5) \quad 1 \frac{1}{4} \div \frac{2}{7} = \frac{5}{4} \div \frac{2}{7} = \frac{5}{4} \times \frac{7}{2} = \frac{35}{8}$$

$$6) \quad 3 \frac{2}{3} \div \frac{3}{5} = \frac{11}{3} \div \frac{3}{5} = \frac{11}{3} \times \frac{5}{3} = \frac{55}{9}$$