

DIVIDING MIXED NUMBERS SHEET 1

To divide mixed numbers, follow these three simple steps:

- 1) Convert the mixed numbers into improper fractions
- 2) 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.

3) Multiply the two fractions together.

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

Example 2 1
$$\frac{2}{5}$$
 \div 4 = $\frac{7}{5}$ \div $\frac{4}{1}$ = $\frac{7}{5}$ x $\frac{1}{4}$ = $\frac{7}{20}$

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

1)
$$1\frac{1}{3} \div \frac{1}{2} = \frac{1}{3} \times \frac{2}{1} = \frac{2}{3} \times \frac{2}{1} = \frac{2}{3} \times \frac{2}{4} = \frac{3}{4} \times \frac{4}{3} = \frac{4}{12}$$

3)
$$2\frac{2}{5} \div 3 = \frac{1}{5} \times \frac{1}{3} = \frac{4}{15}$$
 $3\frac{1}{3} \div \frac{3}{5} = \frac{3}{3} \times \frac{3}{3} = \frac{9}{9}$

5)
$$4\frac{1}{2} \div \frac{2}{5} = --- x - --- = --- 6) 2\frac{3}{5} \div 4 = --- x - --- = ---- 6$$

7)
$$2\frac{4}{5} \div 1\frac{1}{3} = --- x - --- = --- 8)$$
 $3\frac{4}{5} \div 2 = --- x - --- = ----$



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1)
$$1\frac{1}{3} \div \frac{1}{2} = \frac{4}{3} \times \frac{2}{1} = \frac{8}{3}$$
 $1\frac{1}{4} \div \frac{3}{4} = \frac{5}{4} \times \frac{4}{3} = \frac{20}{12}$

3)
$$2\frac{2}{5} \div 3 = \frac{12}{5} \times \frac{1}{3} = \frac{12}{15} \stackrel{4)}{3} \div \frac{3}{5} = \frac{10}{3} \times \frac{5}{3} = \frac{50}{9}$$

5)
$$4\frac{1}{2} \div \frac{2}{5} = \frac{9}{2} \times \frac{5}{2} = \frac{45}{4}$$
 6) $2\frac{3}{5} \div 4 = \frac{13}{5} \times \frac{1}{4} = \frac{13}{20}$

7)
$$2\frac{4}{5} \div 1\frac{1}{3} = \frac{14}{5} \times \frac{3}{4} = \frac{42}{20} \times \frac{8}{5} \div 2 = \frac{19}{5} \times \frac{1}{2} = \frac{19}{10}$$