

Fractions in Context

Starter

(Review of last lessons)

1. One gallon (8 pints) is about $4\frac{1}{2}$ litres. About how many pints is 1 litre?

Working: $8 \div 4\frac{1}{2} = 8 \div \frac{9}{2} = 8 \times \frac{2}{9} = \frac{16}{9} = 1\frac{7}{9}$

2. Find (a) the perimeter and (b) the area of a rectangle whose sides are $8\frac{5}{8}$ cm and $5\frac{3}{4}$ cm.

Working: (a) Perimeter = $8\frac{5}{8} + 8\frac{5}{8} + 5\frac{3}{4} + 5\frac{3}{4}$
 $= 8\frac{5}{8} + 8\frac{5}{8} + 5\frac{6}{8} + 5\frac{6}{8}$
 $= 26\frac{22}{8}$
 $= 28\frac{6}{8}$
 $= 28\frac{3}{4}$

(b) Area = $8\frac{5}{8} \times 5\frac{3}{4} = \frac{69}{8} \times \frac{23}{4} = \frac{1587}{32} = 49\frac{19}{32}$

3. The last 8 pages of a magazine are for advertisements. Two days before publication, $6\frac{7}{8}$ of advertising had been sold. Then $2\frac{1}{4}$ pages were cancelled. What fraction of pages still has to be sold?

Working: $8 - 6\frac{7}{8} = 1\frac{1}{8}$
 $1\frac{1}{8} + 2\frac{1}{4} = 1\frac{1}{8} + 2\frac{2}{8} = 3\frac{3}{8}$ pages

4. The area of a coffee table is $1\frac{9}{40}$ m². It is $1\frac{2}{5}$ long. What is the width of the table?

Working: $1\frac{9}{40} \div 1\frac{2}{5} = \frac{49}{40} \div \frac{7}{5} = \frac{49}{40} \times \frac{5}{7} = \frac{7}{8} \times \frac{1}{1} = \frac{7}{8}$

Video: [Fractions - addition/subtraction](#)

Video: [Fractions - multiplication](#)

Video: [Fractions - division](#)

Video: [Mixed number to improper fraction](#)

Exercise

p148 Ex 9.2 Qu 1ace...(calc), 2ace... (calc), 3, 4, 5ace, 6ace, 7, 8-10

[Textbook answers \(only available during a lockdown\)](#)

