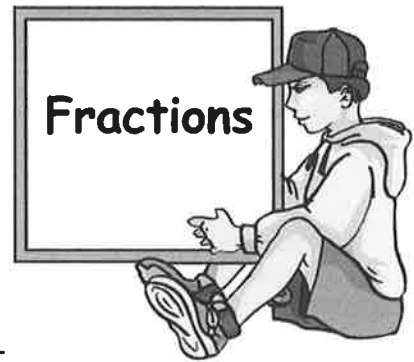


# CHAPTER 9



## Exercise 1

### Revision



1. Find two equivalent fractions for each of the following :-

- a  $\frac{1}{2}$                       b  $\frac{1}{3}$                       c  $\frac{1}{8}$                       d  $\frac{1}{100}$   
e  $\frac{2}{3}$                       f  $\frac{2}{5}$                       g  $\frac{3}{7}$                       h  $\frac{11}{12}$ .

2. Simplify fully ( where possible ) :-

- a  $\frac{2}{4}$                       b  $\frac{6}{9}$                       c  $\frac{15}{21}$                       d  $\frac{24}{36}$   
e  $\frac{11}{88}$                       f  $\frac{75}{100}$                       g  $\frac{17}{51}$                       h  $\frac{122}{144}$ .

3. Write each of the following as fractions and simplify fully :-

- a At first year assembly there were 124 boys out of 240 pupils.  
b At a school fire drill there were 1650 people in the playground.  
There were one hundred and fifty adults.



## Exercise 2

### Top-Heavy & Mixed Fractions



1. Change each of the following top heavy fractions to mixed numbers :-

- a  $\frac{3}{2}$                       b  $\frac{11}{2}$                       c  $\frac{17}{3}$                       d  $\frac{49}{6}$   
e  $\frac{111}{10}$                       f  $\frac{73}{9}$                       g  $\frac{204}{5}$                       h  $\frac{161}{12}$ .

2. 51 kg of potatoes are packed evenly into 9 bags.  
What is the weight of each bag ?



3. Change each of these into mixed numbers and simplify fully where possible :-

- a  $\frac{18}{4}$                       b  $\frac{33}{6}$                       c  $\frac{145}{10}$                       d  $\frac{68}{8}$   
e  $\frac{122}{4}$                       f  $\frac{315}{25}$                       g  $\frac{3333}{6}$                       h  $\frac{147}{12}$ .

4. a How many  $\frac{1}{2}$  pizza slices can you get from  $5\frac{1}{2}$  pizzas ?  
b How many  $\frac{1}{3}$  pizza slices can you get from  $7\frac{2}{3}$  pizzas ?  
c How many  $\frac{1}{6}$  pizza slices can you get from  $4\frac{1}{2}$  pizzas ?



5. Change each of the following mixed numbers to top heavy fractions :-

a  $3\frac{1}{6}$

b  $6\frac{1}{3}$

c  $1\frac{2}{3}$

d  $13\frac{4}{5}$

e  $8\frac{3}{4}$

f  $11\frac{2}{11}$

g  $17\frac{3}{7}$

h  $81\frac{3}{5}$ .

### Exercise 3

### Adding & Subtracting (basic) Fractions



1. Find and simplify fully where possible :-

a  $\frac{1}{2} + \frac{1}{4}$

b  $\frac{1}{4} + \frac{1}{4}$

c  $\frac{3}{5} + \frac{1}{5}$

d  $\frac{7}{11} + \frac{4}{11}$

e  $\frac{3}{5} - \frac{1}{5}$

f  $\frac{7}{8} - \frac{3}{8}$

g  $4\frac{1}{4} + \frac{1}{4}$

h  $7\frac{3}{5} + 1\frac{1}{5}$

i  $8\frac{3}{8} + 2\frac{1}{8}$

j  $9 - 4\frac{1}{4}$

k  $7\frac{5}{9} + 2\frac{4}{9}$

l  $5\frac{1}{2} - 1\frac{1}{4}$ .

2. Two carafes of wine were poured into a punch bowl.

One carafe held  $\frac{5}{8}$  a litre of wine and the other held  $\frac{1}{8}$  litres.

a How much wine is now in the bowl ?

b How much more wine did the first carafe hold than the second ?



3. A room is  $9\frac{3}{4}$  metres long by  $6\frac{1}{4}$  metres wide.

a How much longer is the length than the breadth ?

b Find the perimeter of the room.



### Exercise 4

### Adding & Subtracting (harder) Fractions



1. Calculate :-

a  $\frac{1}{2} + \frac{1}{4}$

b  $\frac{1}{3} + \frac{1}{4}$

c  $\frac{3}{5} + \frac{3}{4}$

d  $\frac{2}{3} + \frac{3}{8}$

e  $\frac{3}{4} - \frac{1}{3}$

f  $\frac{7}{8} - \frac{2}{3}$

g  $\frac{4}{5} - \frac{2}{7}$

h  $\frac{8}{9} + \frac{3}{5}$

i  $\frac{1}{12} + \frac{1}{13}$

j  $\frac{7}{8} - \frac{9}{11}$

k  $\frac{6}{13} + \frac{15}{52}$

l  $\frac{5}{6} - \frac{3}{8}$ .

2. Find :-

a  $5 - 3\frac{1}{2}$

b  $12 - 6\frac{1}{14}$

c  $6\frac{2}{3} - 1\frac{1}{4}$

d  $7\frac{4}{5} - 5\frac{3}{4}$

e  $10\frac{7}{8} - 7\frac{2}{3}$

f  $81\frac{1}{2} - 77\frac{3}{4}$

g  $6\frac{3}{5} - 4\frac{7}{8}$

h  $2\frac{1}{2} - 1\frac{7}{9}$ .

## Revisit - Review - Revise Exercise 9



1. Write down three equivalent fractions for :-

a  $\frac{1}{3}$                       b  $\frac{2}{5}$                       c  $\frac{9}{10}$                       d  $\frac{11}{17}$ .

2. Change each of the following to a top heavy fraction :-

a  $5\frac{1}{2}$                       b  $4\frac{2}{3}$                       c  $8\frac{2}{7}$                       d  $1\frac{9}{11}$ .

3. Change each of the following to a mixed number :-

a  $\frac{11}{3}$                       b  $\frac{20}{7}$                       c  $\frac{101}{9}$                       d  $\frac{75}{10}$ .

4. Find and simplify fully where possible :-

a  $\frac{1}{2} + \frac{1}{5}$                       b  $1\frac{1}{3} + 1\frac{1}{2}$                       c  $3\frac{1}{3} + 2\frac{2}{5}$                       d  $14 - 6\frac{1}{2}$   
 e  $4\frac{1}{2} - 2\frac{2}{7}$                       f  $7\frac{9}{10} - 5\frac{2}{3}$                       g  $8\frac{1}{4} - 5\frac{2}{3}$                       h  $9\frac{1}{3} - 5\frac{2}{5}$   
 i  $7\frac{1}{5} + 1\frac{2}{3}$                       j  $11\frac{3}{4} + 8\frac{7}{9}$                       k  $5\frac{1}{9} - 3\frac{3}{5}$                       l  $9\frac{5}{6} - 8\frac{13}{18}$ .

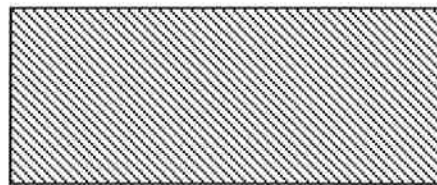
5. Jamie wanted to run  $10\frac{1}{2}$  km during his race practice.  
 He only managed to run  $8\frac{5}{8}$  km.

How far short was he of completing his practice ?



6. a Calculate the perimeter of the rectangle shown.

$5\frac{4}{5}$  cm



b How much longer is the length than the breadth ?

$8\frac{3}{4}$  cm

7. Write the sum represented by the diagram below :-

