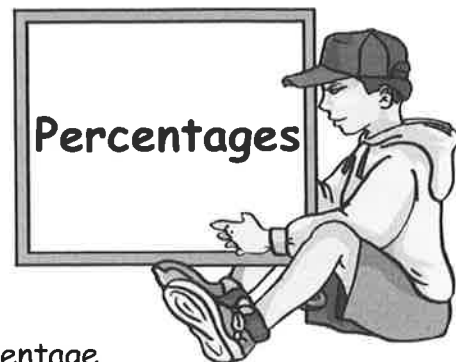


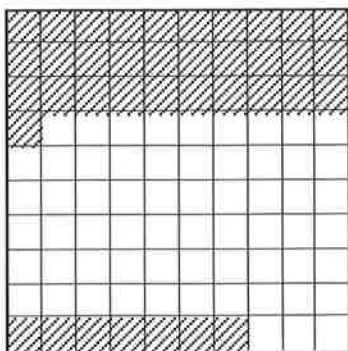
# CHAPTER 12



## Exercise 1



1.



Write down what percentage of the whole square the shaded part is.

2. Write each of these as a fraction :-

- a 27%                      b 13%                      c 9%                      d 1%.

3. Write each of these as a decimal :-

- a 39%                      b 94%                      c 10%                      d 4%.

4. Write each fraction or decimal as a percentage :-

- a  $\frac{73}{100}$                       b 0.05                      c  $\frac{7}{100}$                       d 0.8.

5. Write each percentage as a fraction in its simplest form :-

- a 40%                      b 8%                      c 85%                      d  $12\frac{1}{2}\%$ .

## Exercise 2



1. Copy and complete each of the following :-

- a  $\frac{7}{25} = 7 \div 25 = 0.\dots = \dots\%$                       b  $\frac{25}{80} = 25 \div \dots = 0.\dots = \dots\%$ .

2. Change each of the fractions shown to a decimal then to a percentage :-

- a  $\frac{9}{36}$                       b  $\frac{21}{28}$                       c  $\frac{14}{40}$                       d  $\frac{80}{500}$ .



3. George scored  $\frac{42}{75}$  in his Art exam. Change his mark to a percentage.

4.



Of the 20 pies in a baker's window, 13 of them were filled with cherries.

What percentage of the pies were cherry pies ?

### Exercise 3




1. Work out each of the following :-

- a 50% of £18    b 25% of 20p    c 10% of 90 cm    d 50% of £49  
e 25% of 300 g    f 10% of £2550    g 25% of £2    h 10% of £3.40.

2. a Tiger had £670. He spent 50% of that, buying golf clubs.  
How much did Tiger pay for the clubs?



b  Toby weighed 76 kilograms.  
He ate too many burgers and put on 25% of his weight.  
How many kilograms did he put on?

c This £299 camera is on offer in a sale with 10% off.  
What is the sale price of the camera?



**10% OFF**

### Exercise 4



1. Calculate each of the following :-

- a 12% of £200 =  $(12 \div 100) \times £200 = £.....$   
b 18% of £60    c 32% of 50p    d 85% of 28 km    e 91% of 180 mm  
f 6% of 20 kg    g 22.5% of £120    h 2.4% of £800    i 8.75% of £6000.


2. a There are 120 tennis balls in a ball machine. 55% of them are yellow.

(i) How many balls are yellow?    (ii) How many are not yellow?



b Of the 2550 cabbages bought in by a supermarket chain,  
8% had been part eaten by caterpillars.  
How many cabbages was this?



c  Kath earns £32 800 per year. Ken earns £30 020 per year.  
Kath got a 3% pay rise and Ken got a 4% rise.  
In money terms, who got the bigger rise and by how much?

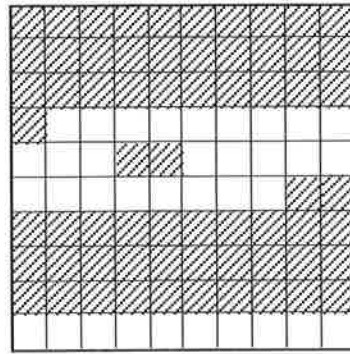
d A Boeing 747 was set out to carry 480 passengers.  
 $12\frac{1}{2}\%$  of the seats were business class.  
How many of the 480 seats were business class?



## Revision Exercise



1. Write down what percentage of the whole square the shaded part is.



2. Write each of the following as a fraction :-  
 a 67%                      b 11%                      c 39%                      d 3%.
3. Write each of the following as a decimal :-  
 a 83%                      b 14%                      c 20%                      d 8%.
4. Write each of the following as a fraction and as a decimal :-  
 a 13%                      b 67%                      c 1%                      d 90%.
5. Write each fraction or decimal as a percentage :-  
 a  $\frac{81}{100}$                       b 0.94                      c  $\frac{5}{100}$                       d 0.09.
6. Find :-  
 a 50% of 60p      b 25% of 72 km      c 50% of £13      d 10% of 9 cm.

You may use a calculator from now on, but you must show working.



7. Find :-  
 a 14% of £30      b 38% of 65 mm      c 12.5% of £192      d 5.2% of 300 kg.
8. Of the 3200 houses built in the new Phoenix estate  
 62.5% of them have an adjoining garage.  
 $87\frac{1}{2}\%$  of these garages have electric doors.
- a How many houses were built with an adjoining garage ?  
 b How many garages were not built with an electric door ?
9. The cost of this laptop in a local store was £332 last month.  
 This month, the price has risen by  $7\frac{1}{2}\%$ . What's the price now ?

