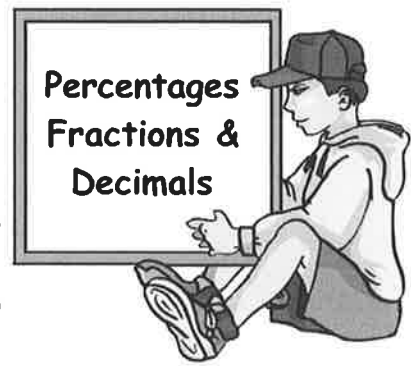


CHAPTER 6



Exercise 1 Percentages - no calculator



- Find each of the following **without** a calculator :-
 - 10% of £24
 - 30% of £420
 - 20% of \$55
 - $33\frac{1}{3}\%$ of 690 kg
 - 25% of £32
 - 75% of 50 m
 - $66\frac{2}{3}\%$ of 39 km
 - 5% of \$600
 - 3% of £7
 - 22% of 7000
 - 2.5% of 160 cm
 - 35% of €700

- A shop is giving a 20% discount on a £240 exercise bike.
How much is the bike now?
 - Julian cycles 30 km **per day** every day.
He is going to reduce this by 15%.
How many km will he cycle next **week**?



- A bank pays an annual rate of 5% interest on their High Fliers account.
Gaz leaves £4800 in his account for a year.
How much interest will he have after :-
 - one year
 - six months
 - three months?

- Five hundred students were asked their favourite take away.
40% - Pizza 35% - Chinese 20% - Indian the rest - Chip shop
How many students chose :-
 - Chinese
 - Chip shop?


Exercise 2 Percentages with a calculator



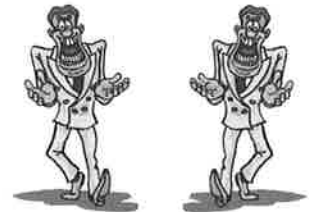
- Find using a calculator :- (Show all your working)
 - 23% of 136 km
 - 76% of 78 kg
 - 19% of 320 m
 - 38.5% of £700
 - 0.6% of \$1260
 - 12.5% of €40
 - 9% of £340
 - 111% of 750 km
 - 3.7% of £10.

2. a A farmer has 3200 chickens. 32% have caught a virus.
- (i) What percentage of chickens do NOT have a virus ?
- (ii) How many chickens do NOT have a virus ?
- b Ninety percent of the chickens produce an egg every day.
How many eggs are produced every week ?
- c 2.5% of the weekly produce has to be destroyed.
How many eggs are destroyed ?



3.  Last November, Norma weighed 64 kg.
After Xmas, her weight had increased by 9%.
What was her weight after Xmas ?

4. Twins Joe and Jack are sales directors who earn £28 000 each.
- Joe is given a wage rise of 7.5%.
 - Jack has his wage reduced by 4%.
- How much more does Joe now earn than Jack ?



Exercise 3

Linking fractions, decimals & percentages



1. Change each of these fractions to percentages, correct to 1 decimal place :-
- a $\frac{2}{3}$ b $\frac{1}{7}$ c $\frac{71}{90}$ d $\frac{142}{80}$.

2. Heather scored the following in four tests :-

$$\begin{array}{ll} \text{Maths} - \frac{17}{20} & \text{English} - \frac{26}{32} \\ \text{French} - \frac{33}{45} & \text{Music} - \frac{7}{10} \end{array}$$

- a Change each test mark into a percentage.
- b Which was her best score ?



3. Re-write the following in order, smallest first :-

a 0.5, 47%, $\frac{24}{50}$, 0.49 b 45% of £72, $\frac{2}{3}$ of £48, $0.04 \times £804$.

Revisit - Review - Revise Exercise 6a



- Change each of the following into a fraction in its simplest form :-

a 50%	b 25%	c 75%	d 33.333...%
e 60%	f 70%	g 5%	h 77%
- Change each of the following to a percentage :-

a 0.43	b 0.09	c 0.3	d 0.225
e $\frac{2}{3}$	f $\frac{4}{5}$	g 1.25	h $1\frac{1}{2}$
- David gets a 10% increase on his £1640 monthly wage.
How much does he now earn ?
 - Angela has her £640 weekly wage decreased by 15%.
How much is her weekly wage now ?




Revisit - Review - Revise Exercise 6b



- Find using a calculator :- (Show all your working)

a 27% of 2300 km	b 57% of 18 kg	c 13% of 608 m
d 27.5% of £1100	e 0.3% of \$4500	f 105% of €400
g $0.75 \times \text{£}340$	h $0.1 \times 550 \text{ kg}$	i 0.005×8600
j $\frac{2}{3}$ of \$810	k $\frac{4}{5}$ of 8855 m	l $\frac{12}{13}$ of 520 km.
- Keith earns £18 400 per annum as a plumber.
How much would he earn if his salary was :-

a increased by 17%	b decreased by 9.5% ?
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SpotsAlive buy football strips for £25.
They intend to sell them at a profit of 28%.
How much should they sell each strip for ?
- A car costs £8600 cash.
VirgoCars let you pay a 16% deposit and
36 monthly payments of £224.35.
How much cheaper is it to pay cash ?

