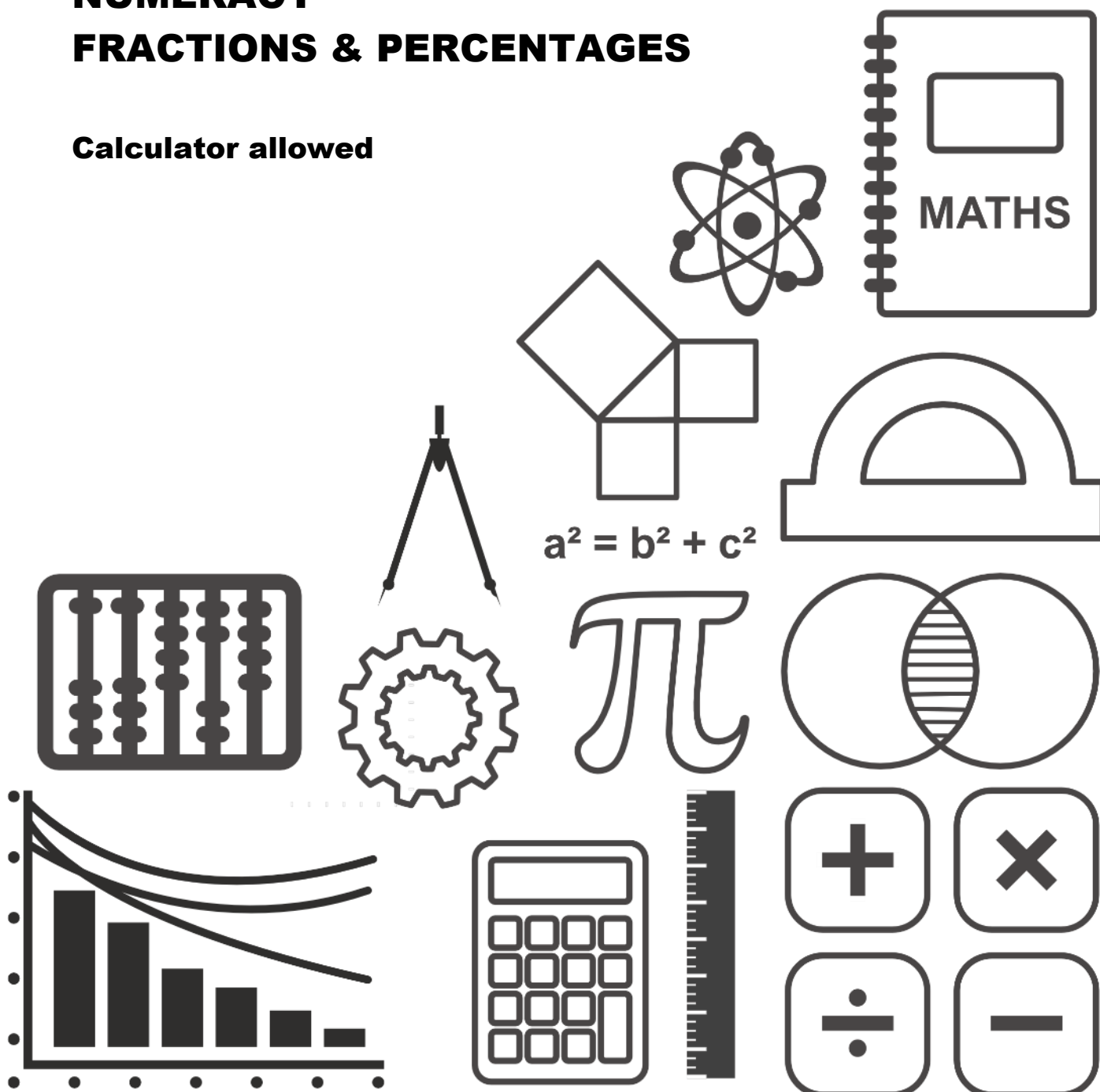


MATHSDIY

GCSE TOPIC BOOKLET NUMERACY FRACTIONS & PERCENTAGES

Calculator allowed



1. Maldwyn sells flags, scarves and hats outside a stadium.
At the end of a football match, Maldwyn sells his remaining flags, scarves and hats at sale prices.

(a)

Scarf



Was £4.97
Now $\frac{3}{7}$ off in the sale

Flag



£8.50 each
Buy 2 and get 26% off the total price

- (i) Calculate the sale price of a scarf. [2]

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- (ii) Calculate the cost of buying **two** flags in the sale. [2]

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- (b) Before the sale, a hat cost £3.99.
In the sale, the hat costs £2.66.
By what fraction has the cost of the hat been **reduced**?
Circle your answer. [1]

$\frac{1}{4}$

$\frac{1}{3}$

$\frac{2}{3}$

$\frac{3}{4}$

$\frac{1}{2}$

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2.

$\frac{6}{11}$ of Jenna's friends have pets.

Of these friends with pets, $\frac{2}{3}$ of them have a dog.

Use this information to answer each of the following questions.

- (i) Jenna has 33 friends.
How many of her friends have a pet? [2]

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- (ii) What fraction of Jenna's friends have a dog? [2]

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3.

In a portion of baked beans there is:

- 1.85 g of salt,
- 11.7 g of sugar.

For women, the recommended daily allowance of:

- salt is 6 g,
- sugar is 90 g.

Consider a portion of baked beans.

Is it salt or sugar that provides the greater proportion of the recommended daily allowance for women?

You must show all your working. [3]

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4. (a)

<p>T-shirt</p>  <p>Was £46</p> <p>Now 22% off in the sale</p>	<p>Pair of shoes</p>  <p>Was £43.60</p> <p>Now $\frac{3}{8}$ off in the sale</p>
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(i) Calculate the sale price of the T-shirt. [2]

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(ii) Calculate the sale price of the pair of shoes. [2]

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(b) Cristiano is 22 years old.
He sometimes travels from Rhyl to Llandudno Junction by train.
The cost of a single rail ticket from Rhyl to Llandudno Junction is £7.80.

Nerys advises Cristiano to buy a Railcard.
Cristiano says,

It is not worth paying £30 for the Railcard.

How many times in a year would Cristiano have to travel to make it worthwhile for him to buy a Railcard? [3]

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