

Best way to learn maths is to do maths!

Revision Advice

**Mathematics Exam Practice Workbook:** Pick a book and work through the questions. Check your answers at the back of the book, correcting any mistakes in any way you will know if there are any topics you need to revise.

**GCSE Revision Cards:** Each card has a different topic on one side and QR codes on the back which link you to a tutorial video, exam questions and answers. Work your way through the exam questions until you feel confident on each topic.

**YouTube:** Use the revision list on the Google Doc that has been provided by Sparx. For each topic there is a Sparx clip. Type this in the search bar on YouTube and it will take you to the video tutorial and answers.

**Mock exams properly:** Mock exams are the best way for you to test the waters before your real exam. Do these with a strict timetable (and sticking to it) and well-rehearsed by May and June.

**Mock Exams:** Up until the first set of Mock Exams, we will be having sessions in the canteen on a Tuesday from 3.10-4.10. After this time, we will be setting a new revision schedule in the canteen.

links from the revision cards.

maths.com/

**MathsTutor** Provides free tutoring once a week and past papers.

mathsmannahkettlemaths.co.uk)

past papers for practice and exam style questions

genie.co.uk/gcse.html

**Maths.com** lots of questions and answers for every topic

teacherhub.com/topics-secondary.html

resources for practice

maths.com/

resources of quizzes and tutorial videos, links to the revision

maths.uk/

**Maths topics revision** Quizzes categorised into topics

mathsmaths.com/blog/gcse-maths-20-topic-revision-

Department we can be contacted on the following emails:

Area of a trapezium =  $\frac{1}{2}(a + b)h$

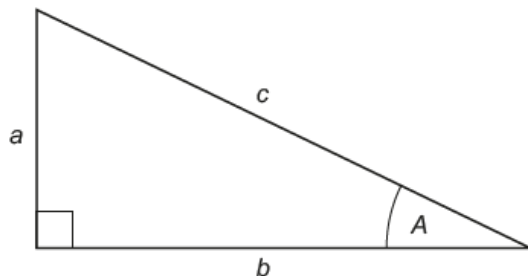
Volume of a prism = area of cross section  $\times$  length

Where  $r$  is the radius and  $d$  is the diameter:

Circumference of a circle =  $2\pi r = \pi d$

Area of a circle =  $\pi r^2$

Pythagoras' Theorem and Trigonometry



In any right-angled triangle where  $a$  and  $b$  are the length of the sides and  $c$  is the hypotenuse:

$a^2 + b^2 = c^2$

In any right-angled triangle where  $a$  and  $b$  are the length of the sides and  $c$  is the hypotenuse:

$\sin A = \frac{a}{c}$      $\cos A = \frac{b}{c}$

Compound Interest

Where  $P$  is the principal amount,  $r$  is the interest rate over a given period and  $n$  is the number of times that the interest is compounded:

Total accrued =  $P\left(1 + \frac{r}{100}\right)^n$

Probability

Where  $P(A)$  is the probability of event A and  $P(B)$  is the probability of event B:

$P(A \text{ or } B) = P(A) + P(B)$

Higher Formula Sheet

Perimeter, Area and Volume

Where  $a$  and  $b$  are the lengths of the parallel sides and  $h$  is their perpendicular separation:

Area of a trapezium =  $\frac{1}{2}(a + b)h$

Volume of a prism = area of cross section  $\times$  length

Where  $r$  is the radius and  $d$  is the diameter:

Circumference of a circle =  $2\pi r = \pi d$

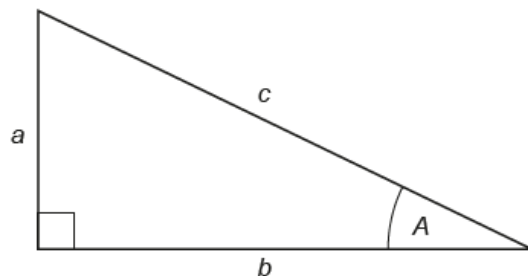
Area of a circle =  $\pi r^2$

The Quadratic Formula

The solutions of  $ax^2 + bx + c = 0$  are:

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Pythagoras' Theorem and Trigonometry



In any right-angled triangle where  $a$  and  $b$  are the length of the sides and  $c$  is the hypotenuse:

$a^2 + b^2 = c^2$

In any right-angled triangle ABC where  $a$  and  $b$  are the length of the sides and  $c$  is the hypotenuse:

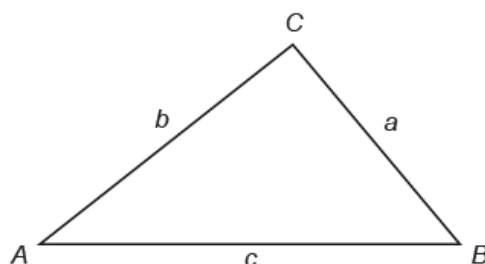
$\sin A = \frac{a}{c}$      $\cos A = \frac{b}{c}$

In any triangle ABC where  $a$ ,  $b$  and  $c$  are the length of the sides:

sine rule:  $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

cosine rule:  $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle =  $\frac{1}{2}ab \sin C$



Compound Interest

Where  $P$  is the principal amount,  $r$  is the interest rate over a given period and  $n$  is the number of times that the interest is compounded:

Probability

Where  $P(A)$  is the probability of event A and  $P(B)$  is the probability of event B: