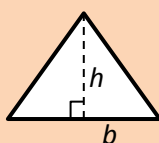
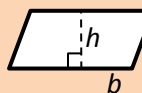


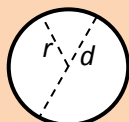
For GCSE (9-1) Mathematics, all students should know...



Area of triangle = $\frac{1}{2}bh$

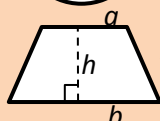


Area of parallelogram = bh



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

Area of circle = πr^2



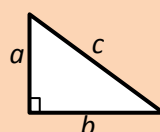
Area of trapezium = $\frac{1}{2}(a + b)h$



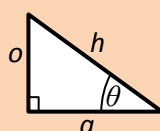
Volume of cuboids =
length \times width \times height



Volume of prisms =
length \times area of cross section



For right-angled triangles, label the hypotenuse c & the other sides a and b
Pythagoras' theorem $a^2 + b^2 = c^2$



For right-angled triangles, label the hypotenuse h , the side adjacent to the angle a & the side opposite the angle a

$\sin \theta = \frac{o}{h}$ $\cos \theta = \frac{a}{h}$ $\tan \theta = \frac{o}{a}$

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$

Compound interest where P is principal amount

Amount = $P \left(1 + \frac{r}{100}\right)^n$ r is interest rate
 n is times interest applied

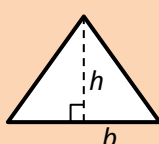
Probability $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$
where $P(A)$ is the probability of outcome A
 $P(B)$ is the probability of outcome B

GCSE (9-1)

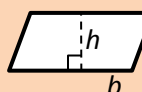
MATHEMATICS

OCR
Oxford Cambridge and RSA

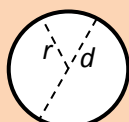
For GCSE (9-1) Mathematics, all students should know...



Area of triangle = $\frac{1}{2}bh$

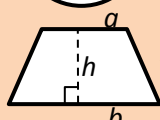


Area of parallelogram = bh



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

Area of circle = πr^2



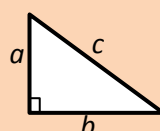
Area of trapezium = $\frac{1}{2}(a + b)h$



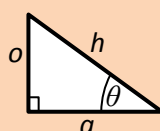
Volume of cuboids =
length \times width \times height



Volume of prisms =
length \times area of cross section



For right-angled triangles, label the hypotenuse c & the other sides a and b
Pythagoras' theorem $a^2 + b^2 = c^2$



For right-angled triangles, label the hypotenuse h , the side adjacent to the angle a & the side opposite the angle a

$\sin \theta = \frac{o}{h}$ $\cos \theta = \frac{a}{h}$ $\tan \theta = \frac{o}{a}$

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$

Compound interest where P is principal amount

Amount = $P \left(1 + \frac{r}{100}\right)^n$ r is interest rate
 n is times interest applied

Probability $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$
where $P(A)$ is the probability of outcome A
 $P(B)$ is the probability of outcome B

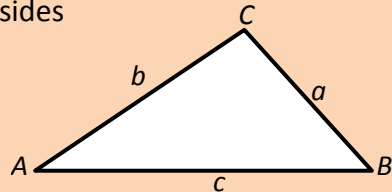
GCSE (9-1)

MATHEMATICS

OCR
Oxford Cambridge and RSA

For GCSE (9-1) Mathematics, Higher tier students should also know...

In any triangle ABC where a , b and c are the lengths of the sides



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

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

Cosine rule $a^2 = b^2 + c^2 - 2bccosA$

The quadratic formula

The solutions of $ax^2 + bx + c = 0$ where $a \neq 0$

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

Probability

$$P(A \text{ and } B) = P(A \text{ given } B) P(B)$$

where $P(A)$ is the probability of outcome A
 $P(B)$ is the probability of outcome B

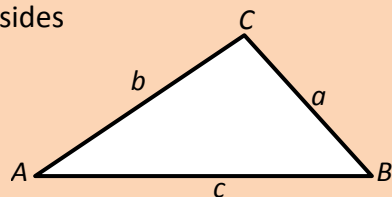
GCSE (9-1)

MATHEMATICS

OCR
Oxford Cambridge and RSA

For GCSE (9-1) Mathematics, Higher tier students should also know...

In any triangle ABC where a , b and c are the lengths of the sides



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

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

Cosine rule $a^2 = b^2 + c^2 - 2bccosA$

The quadratic formula

The solutions of $ax^2 + bx + c = 0$ where $a \neq 0$

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

Probability

$$P(A \text{ and } B) = P(A \text{ given } B) P(B)$$

where $P(A)$ is the probability of outcome A
 $P(B)$ is the probability of outcome B

GCSE (9-1)

MATHEMATICS

OCR
Oxford Cambridge and RSA