

**Paper Reference(s) 1MA1/1F**  
**Pearson Edexcel Level 1/Level 2 GCSE (9–1)**

**Mathematics**  
**PAPER 1 (Non-Calculator)**  
**Foundation Tier**

**Thursday 16 May 2024 – Morning**

**Time: 1 hour 30 minutes**

**Formulae Booklet**

**DO NOT RETURN THIS BOOKLET WITH  
THE QUESTION PAPER.**

## Perimeter, area and volume

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

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

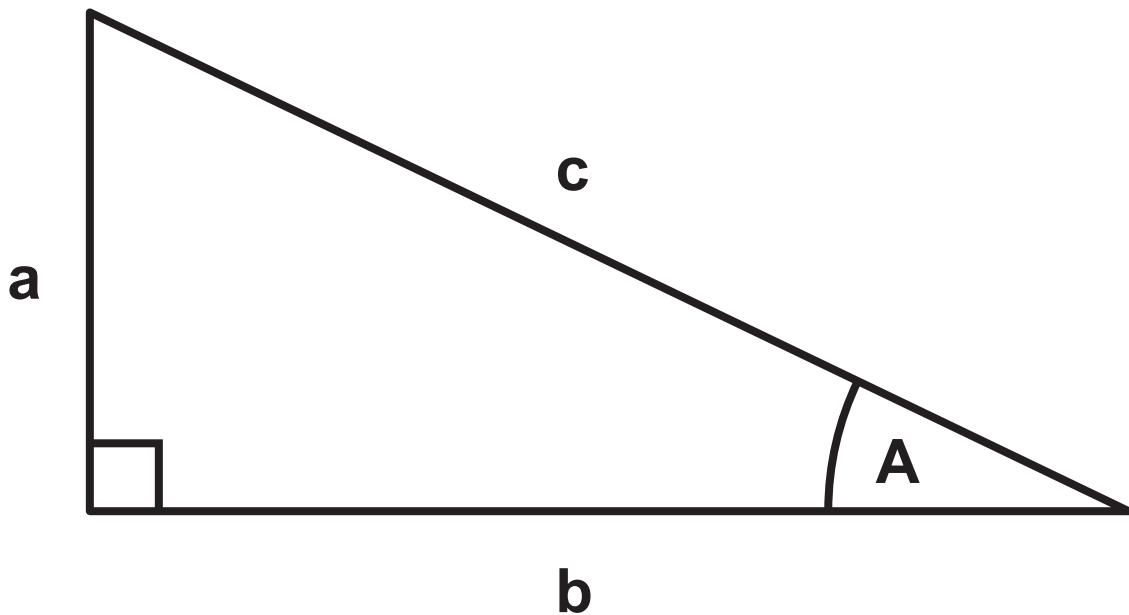
Volume of a prism = area of cross section  $\times$  length

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

$$\text{Circumference of a circle} = 2\pi r = \pi d$$

$$\text{Area of a circle} = \pi r^2$$

## Pythagoras' Theorem and Trigonometry



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

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

## Compound Interest

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

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

## Probability

Where **P(A)** is the probability of outcome **A** and **P(B)** is the probability of outcome **B**:

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

**END OF EXAM AID**