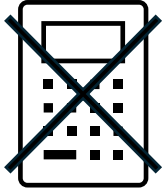


Surname:

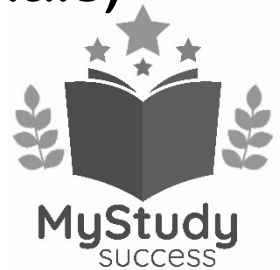
Forename(s):

GCSE Mathematics

Multiplication (Integers & Decimals)



Grade 1



These questions get more difficult as you go through this paper.

This topic could come up on a non-calculator paper.

Materials

- **Formulae Sheet** (on the next page)
- **Black** ink or ball-point pen
- Pencil
- Eraser
- Protractor
- Compass
- Tracing Paper
- **Calculator not allowed**

Instructions

- Show **all** of your working.
- Draw diagrams in pencil.
- Plot graphs in pencil.
- Diagrams are **not** accurately drawn, unless otherwise indicated.

Foundation Tier Formulae 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 = $\frac{1}{2} (a + b) h$

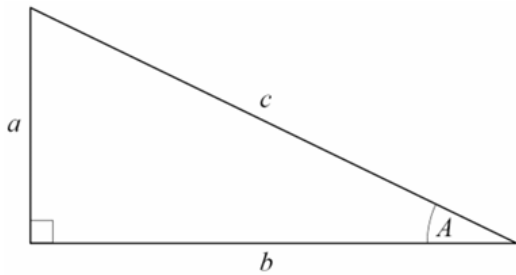
Volume of a prism = area of cross section $\times$ length

Where r is the radius and d is the diameter:

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

Area of a circle = πr^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 :

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

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

1 Work out 6×43

(Total for question 1 is 1 mark)

2 Work out 5×827

(Total for question 2 is 1 mark)

3 Work out 9×209

(Total for question 3 is 1 mark)

4 Work out 8×1241

(Total for question 4 is 1 mark)

5 Work out 18×46

(Total for question 5 is 2 marks)

6 Work out 35×77

(Total for question 6 is 2 marks)

7 Work out 26×712

(Total for question 7 is 2 marks)

8 Work out 45×183

(Total for question 8 is 2 marks)

9 Work out 2×4.6

(Total for question 9 is 2 marks)

10 Work out 7.2×8.2

(Total for question 10 is 3 marks)

11 Work out 3.13×4.2

(Total for question 11 is 3 marks)

12 Work out 0.04×0.6

(Total for question 12 is 2 marks)

13 Work out 2.3×0.014

(Total for question 13 is 3 marks)