Answer Guide

Please attempt all questions **without** a calculator.

Year 11 – Paper 1 Revision Pack (Foundation)

Friday 20th May 2021 - AM

CORBY Technical School

How to use this revision pack

1. Review the list of topics that will appear on paper 1 of the summer exams. This can be found on the next page.
2. Work through the revision pages for each of the topics that will appear on the summer exams.
3. Use the electronic mark scheme to check your work and identify areas of weakness. The electronic mark scheme can be found on Teams and Satchel One.
4. Follow up with either:

   A. Using the Hegarty Maths Clip Numbers to watch video tutorials on areas of weakness. You should then complete the quizzes on Hegarty to test whether you have closed your gap in knowledge.

   OR

   B. Follow the link for Maths Genie Exam Practice and search for the pack of questions relating to each topic (Mark Schemes Provided)

   Each of these options is clearly labelled at the bottom of each page of revision.

5. You can also access whole past papers at https://corbettmaths.com/2022/02/28/edexcel-gcse-foundation-summer-2022/ You should select Advanced Information – Paper 1 (Set A and Set B)
6. Email your class teacher if you have any questions or require further resources. Email Mr Lee if you need help during the school holidays.

Number (*see Ratio – some overlap of topic areas)	
Arithmetic	Money
	Negative number
Fractions	Order fractions, decimals, percentages
	Fraction of an amount
	Fraction arithmetic
Properties	Place value
	Product of prime factors
Standard Form	Conversion
	Calculation
Approximation and Estimation	Estimation

Algebra	
Manipulation	Simplification
	Substitute values
Equations and inequalities	Linear inequality
	Quadratic equation
Graphs	Quadratic graph
Sequences	Linear sequence

Statistics	
Diagrams	Pictogram
	Bar chart
	Stem and leaf diagram

Ratio, proportion, and rates of change (*see Number – some overlap of topic areas)	
Conversion	Length
Percentages	Percentage of an amount
	Percentage increase
Ratio	Write as a ratio
	Share in a ratio
Proportion	Direct proportion
Compound Measures	Speed
	Density

Geometry and measures	
Shape	Reflection
	Plan and elevation
Angles	Angles in a polygon
Length, area and volume	Volume of a cube
	Volume of a cylinder
Pythagoras's Theorem and Trigonometry	Exact trigonometric values

Probability	
Probability	Probability
	Frequency tree

Advanced Information – 1F Non-Calculator

Section A: Number

Number (*see Ratio – some overlap of topic areas)	
Arithmetic	Money
	Negative number
Fractions	Order fractions, decimals, percentages
	Fraction of an amount
	Fraction arithmetic
Properties	Place value
	Product of prime factors
Standard Form	Conversion
	Calculation
Approximation and Estimation	Estimation

Money

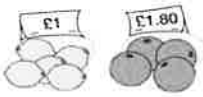
How much would it cost for 16 oranges?

£7.20

How much more does one orange cost than one lemon?

25p

A bag of 5 lemons costs £1
A bag of 4 oranges costs £1.80



For my recipe I need 30 lemons and 24 oranges.
How much will they cost altogether?

£ 16.80

The shop has a delivery of 130 oranges. How many bags an they fill?

32

FOLLOW-UP WORK hegartymaths Clips 743-754 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html

Negative Number

Work out

$-5 + 4 = -1$

$-5 - 4 = -9$

$3 - 9 = -6$

$-12 - (-2) = -10$

Work out

$-5 \times 4 = -20$

$-5 \times -4 = 20$

$(-7)^2 = 49$

$(-2)^3 = -8$

Work out

$-25 \div 5 = -5$

$-25 \div -5 = 5$

The table shows the temperature in four cities on a day in January.

City	Temperature
London	3 °C
New York	-2 °C
Tokyo	5 °C
Oslo	-4 °C

(a) Write down the name of the city with the lowest temperature. Oslo

(b) Work out the difference between the temperature in New York and the temperature in Tokyo. 7°c

The next day the temperature in New York increased by 3 °C.

(c) Work out the new temperature in New York. 1°c

FOLLOW-UP WORK hegartymaths Clips 37-44 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Negative Numbers

Ordering Fractions, Decimals & Percentages

Convert the following to decimals:	*Convert the following to fractions:*
56% 0.56 5% 0.05	0.67 67/100 0.07 7/100
$\frac{9}{10}$ 0.9 $\frac{7}{20}$ 0.35	56% 56/100 = 14/25 5% 5/100 = 1/20
Convert the following to percentages:	**Write the following numbers in order of size. Start with the smallest number.**
0.67 67% 0.07 7%	75% $\frac{7}{10}$ 0.72 0.9 $\frac{4}{5}$
$\frac{9}{10}$ 90% $\frac{7}{20}$ 35%	$\frac{7}{10}$, 0.72, 75%, $\frac{4}{5}$, 0.9

FOLLOW-UP WORK hegartymaths Clips 52, 55, 73-76, 82, 83, 149

https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Fractions, Decimals & Percentages

Fraction of an amount

Find 3/4 of 28.	Increase 28 by 3/4
21	49
3/4 of x is 33. Find x.	3/4 of x is 12. Find 5/4 of x.
44	20

FOLLOW-UP WORK hegartymaths Clip 77

https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Fractions of an Amount

Fraction Arithmetic

$2\frac{3}{4} \times 1\frac{2}{7}$ $= \frac{99}{28} = 3\frac{15}{28}$	$2\frac{3}{4} + 1\frac{2}{7}$ $= \frac{113}{28} = 4\frac{1}{28}$
$2\frac{3}{4} - 1\frac{2}{7}$ $= \frac{41}{28} = 1\frac{13}{28}$	$2\frac{3}{4} \div 1\frac{2}{7}$ $= 77/36 = 2\,5/36$

FOLLOW-UP WORK hegartymaths Clips 65-70 80 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Fractions

Place Value

Write down the value of 6 *in the number* 4654 600 *Write down the value of* 6 *in the number* 6054 6000	*Write down the value of* 6 *in the number* 304.6 0.6 *Write down the value of* 6 *in the number* 105.06 0.06
Write down a 5 *digit even number that has* 3 *in its thousands digit.* *You can only use the digit* 3 ***once***! _ 3 _ _ _ must end in 0, 2, 4, 6 or 8.	Here are 4 number cards. 5 7 2 3 (a) Write down the largest three digit number that can be made using these number cards. (1) 753 (b) Arrange the cards to give the smallest possible answer to the sum. or 2 7 · 3 5 (1) 2 5 3 7

FOLLOW-UP WORK hegartymaths Clips 13, 45 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Place Value

Product of prime factors

Express 50 as a product of prime factors $50 = 2 \times 5^2$	*Express 96 as a product of prime factors* $96 = 2^5 \times 3$
Given that $40 = 2^3 \times 5$, *Express 80 as a product of prime factors* $2^3 \times 5 \times 2 = 2^4 \times 5$ *Express 400 as a produdct of prime factors* $2^3 \times 5 \times 10 = 2^4 \times 5^2$	*Given that* $20 = 2^2 \times 5$, *What is the smallest number you can multiply 20 by to get a square number?* 5

FOLLOW-UP WORK hegartymaths Clip 29 30 32 35 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Prime Factors, HCF & LCM

Standard Form

Write the following in standard form: 47 000 000 4.7×10^7 300 300 3.003×10^5 0.0007 7×10^{-4} 45×10^4 4.5×10^5	*Write the following in ordinary form:* 4.5×10^8 450000000 2.003×10^4 20030 2×10^{-5} 0.00002
Work out: $(4.5 \times 10^7) \times (3 \times 10^4)$ 1.35×10^{12} $(4.5 \times 10^7) \div (3 \times 10^4)$ $= 1.5 \times 10^3$	*Work out:* $(4.5 \times 10^5) + (3 \times 10^4)$ 4.8×10^5

FOLLOW-UP WORK hegartymaths Clip 122-127 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Standard Form

Estimation

a. What square numbers does $\sqrt{40}$ lie between? 36 and 49 *b. Estimate $\sqrt{40}$* between 6 and 6.5	*Estimate:* $\frac{3.54 \times 105}{2.3}$ $\approx \frac{4 \times 100}{2} = 200$
Estimate: $\frac{31 \times 46}{0.496}$ ≈ 3000	*Mark gets paid £8.23 per hour.* *Each week Mark works 42 hours.* *Estimate how much money mark gets per week.* £320 *Is this an over or under estimate? Explain* under - rounded both numbers down

FOLLOW-UP WORK hegartymaths Clip 131 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Estimation

Section B: Algebra

Algebra	
Manipulation	Simplification
	Substitute values
Equations and inequalities	Linear inequality
	Quadratic equation
Graphs	Quadratic graph
Sequences	Linear sequence

Simplification

Simplify:	*Simplify*:
$a+a+a+a = 4a$ $a \times a \times a \times a = a^4$ $3 \times a \times 2 \times b = 6ab$ $3 \times a \times 2 \times a = 6a^2$	$a-2a+6a = 5a$ $2a+3b+4a+b = 6a+4b$ $2a-3b-4a+7b = -2a+4b$
Simplify:	*Simplify*:
$a^2+a^2+a^2 = 3a^2$ $7ab+2ab-3ab = 6ab$	$\frac{3x+5x}{2} = 4x$

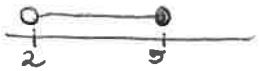
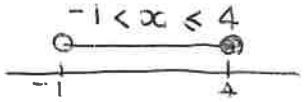
FOLLOW-UP WORK hegartymaths Clips 156-159, 173, 174 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Simplifying Algebra

Substitution

If $a=4$ and $b=5$, work out:	*If $a=-9$ and $b=3$, work out*:
$a+b = 9$ $3a+2b = 22$ $a^2-b = 11$	$a+b = -6$ $3a+2b = -21$ $a^2-b = 78$
When $a=5$ and $b=-2$, work out $2a^2 = 50$ $b^2+a = 9$	$v=u+at$: *Find v when $u=2, a=\frac{1}{2}$ and $t=-10$* $v = -3$

FOLLOW-UP WORK hegartymaths Clips 155, 278, 780-783 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Substitution

Inequalities

Solve $4x - 1 \geq 10$ $x \geq \frac{11}{4}$	*Solve* $4x - 1 \geq 2x + 11$ $x \geq 6$
a. Represent the following on a number line: $2 < x \leq 5$  *b. List the integers that satisfy this inequality.* 3, 4, 5	*Represent the following on a number line:* $-3 < 2x - 1 \leq 7$ $-1 < x \leq 4$ 

FOLLOW-UP WORK hegartymaths Clips 265-272 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Inequalities

Quadratic Equations

Solve: $(x - 4)(x + 2) = 0$ $x = 4 \quad x = -2$	*Solve*: $x^2 - 10x + 16 = 0$ $(x - 8)(x - 2) = 0$ $x = 8 \quad x = 2$
Solve: $x^2 - x - 6 = 0$ $(x - 3)(x + 2) = 0$ $x = 3 \quad x = -2$	*Solve*: $x^2 = 5x + 24$ $x^2 - 5x - 24 = 0$ $(x - 8)(x + 3) = 0$ $x = 8 \quad x = -3$

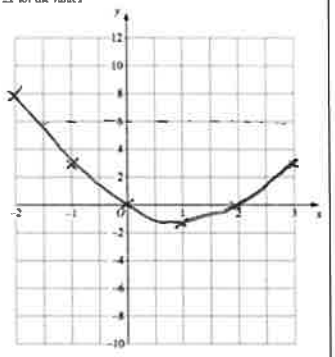
FOLLOW-UP WORK hegartymaths Clips 230-234 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Solving Quadratics

Quadratic Graphs

(a) Complete the table of values for $y = x^2 - 2x$

x	-2	-1	0	1	2	3
y	8	3	0	-1	0	3

(b) On the grid, draw the graph of $y = x^2 - 2x$ for the values of x from -2 to 3



b. Find the coordinates of the turning point

(1, -1)

c. Find the roots of $y = x^2 - 2x$

$x = 0$ $x = 2$

d. Find an estimate to $x^2 - 2x = 6$

$x = -1.5$

FOLLOW-UP WORK hegartymaths Clips 251-255 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Drawing Quadratic Graphs

Linear Sequences

Find the next three terms of the following linear sequences:

24, 29, 34 4, 9, 14, 19, ... ~~5n − 1~~

4.5, 5.1, 5.7 2.7, 3.3, 3.9, ... ~~0.6n + 2.1~~

12, 5, -2 40, 33, 26, 19, ... ~~−7n + 47~~

Find the nth term of the following linear sequences:

3, 7, 11, 15, ... 4n − 1

−10, −4, 2, ... 6n − 16

9, 7, 5, 3, ... −2n + 11

Find the 5th term of the following sequences:

$4n - 9$

$= 11$

$1 - 3n$

$= -14$

Determine whether 50 is in the sequence with nth term 5n + 4. Explain your reasoning.

no as $n = 46/5$

Determine whether 59 is in the sequence with nth term 5n + 4. Explain your reasoning.

yes as $n = 11$

FOLLOW-UP WORK hegartymaths Clips 196-198 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Sequences (Nth Term)

Section C: Statistics

Statistics	
Diagrams	Pictogram
	Bar chart
	Stem and leaf diagram

Pictograms

The pictogram shows the amount of money raised by four tutor groups.

key ○ = £10

S	○○○○○○	60
T	○○○	30
E	○○○○◐	£45
P	○○○◐	35

(a) Complete the pictogram [4]

(b) How much money was raised in total?

£170 [1]

The pictogram gives information about the number of emails Sami sent on each of five days last week.

Monday	▭ ▭ ▭ ▯
Tuesday	▭ ▭ ▭ ▭ ▭ ▱
Wednesday	▭ ▭ ▭ ▭ ▭ ▭ ▯
Thursday	▭ ▭ ▭ ▭ ▭ ▭ ▫
Friday	▭ ▭ ▭ ▭ ▭ ▭ ▭ ▭

▭ represents 8 emails

Work out the mean number of emails Sami sent on these 5 days.

46.4

FOLLOW-UP WORK hegartymaths Clip 426 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Pictograms

Pictograms

The pictogram shows information about the number of vinyl records sold in a shop on Monday and on Tuesday.

Monday	○ ○ ○
Tuesday	○ ○ ◔
Wednesday	○ ○
Thursday	○ ○ ◔

Key: ○ represents 8 vinyl records

16

20

On Wednesday and Thursday, a total of 36 vinyl records were sold. The number of records sold on Thursday four more than the number sold on Wednesday.

Complete the pictogram.

The pictogram shows information about the number of vinyl records sold in a shop on Monday and on Tuesday.

Monday	○ ○ ○
Tuesday	○ ○ ◔
Wednesday	◔
Thursday	○ ○ ○ ○

Key: ○ represents 8 vinyl records

4

32

On Wednesday and Thursday a total of 36 vinyl records were sold.
The number of records sold on Thursday was 9 times the number of records sold on Wednesday.

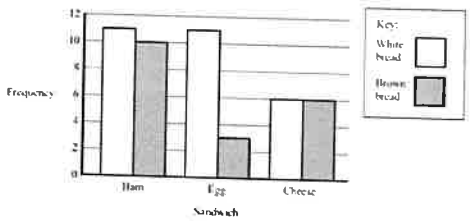
(b) Use this information to complete the pictogram.

FOLLOW-UP WORK hegartymaths Clip 426 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Pictograms

Bar Charts

Ann works in a sandwich shop.

The dual bar chart shows information about the sandwiches sold.



More white bread sandwiches were sold than brown bread sandwiches.

Work out how many more white bread sandwiches.

9

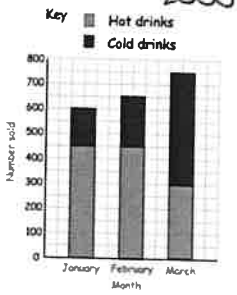
(2 marks)

The composite bar chart shows us how many cold drinks were sold in January, February and March.

(a) How many hot drinks were sold in March? 300

(b) How many cold drinks were sold in February? 200

(c) How many drinks were sold altogether? 2000



FOLLOW-UP WORK hegartymaths Clip 425 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Bar Charts

Stem and Leaf

The number of people visiting a cafe each day, for 11 days, is listed below.

104 131 120 115 109 124 128 112 116 128 125

(a) Complete an ordered stem and leaf diagram for this information.
A key has been included.

Key: 10|4 means 104

10	4 9
11	5 6 8
12	0 0 4 5 8
13	1

(2)

Question 5: The following stem and leaf diagram shows times taken for 15 people to complete a jigsaw.

Key: 3|1 means 31 minutes

3	1 9
4	0 3 6
5	1 7 7 8 9
6	0 3 4 6
7	5

(a) Write down the modal time taken. 57

(b) Write down the median time taken. 57

(c) Write down the range of times taken. 44

(d) What fraction of the people took over one hour? 4/15

FOLLOW-UP WORK hegartymaths Clips 430-433 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Stem and Leaf

Section D: Ratio, Proportion & Rates of Change

Ratio, proportion, and rates of change (*see Number – some overlap of topic areas)	
Conversion	Length
Percentages	Percentage of an amount
	Percentage increase
Ratio	Write as a ratio
	Share in a ratio
Proportion	Direct proportion
Compound Measures	Speed
	Density

Conversion

Convert the following:

2.5m *into cm* 250

32cm *into mm* 320

345cm *into m* 3.45

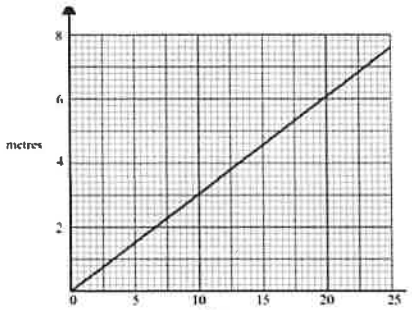
Convert the following:

2.5km *into m* 2500

1005m *into km* 1.005

Convert the following:

3m *into mm* 3000



a. Change 12 feet into metres 3.6 feet
b. Change 25 metres into feet. 82.5

FOLLOW-UP WORK hegartymaths Clips 692-694, 705-706 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Conversion and Units

Percentages of an amount

Find 32% *of* 160

51.2

Find 2.5% *of* 140

3.5

15% *of a number is* 30, *What is the number?*

200

Find 145% *of* 60

87

FOLLOW-UP WORK hegartymaths Clip 84-86 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Percentages

Percentage Increase

Increase 40 *by* 10% 44	*Increase* 36 *by* 11% 39.96
Working out 153 × 1.03 *is the same as increasing by* ***what*** %? 3%	*Working out* 153 × 1.005 *is the same as increasing by* ***what*** %? 0.5%

FOLLOW-UP WORK hegartymaths Clips 88, 91-92, 94, 97-98 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Percentages

Use of Ratio & Ratio as fractions

In Y7 there are 40 *left handed students and* 160 *right handed students.* *Write the ratio of left handed to right handed students in its simplest form.* 1 : 4	*There are red and blue counters in a bag.* $\frac{3}{5}$ *of the counters are red.* *Write the ratio of red counters to blue counters.* 3 : 2
The ratio of red to blue counters is 3:1. *What fraction of the counters are blue?* $\frac{1}{4}$	*Write* 2:7 *in the form* 1:n 1 : 3.5

FOLLOW-UP WORK hegartymaths Clips 328-329 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Writing and Simplifying Ratio

Sharing in a given ratio

Simplify the ratio

3 : 6 : 2

Divide £78 in this ratio.

18 : 36 : 24

Nathan, Ayesha, and Jordan share some money in the ratio 9 : 18 : 12

24

Ayesha gets £18 more than Nathan. How much does Jordan get?

£ 195

Nathan and Jordan have £105 together. What is the total amount?

FOLLOW-UP WORK hegartymaths Clip 332-335 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Ratio

Direct Proportion

Here is a list of ingredients for making **10** Flapjacks.

	Ingredients for 10 Flapjacks
120g	80 g rolled oats
90g	60 g butter
45g	30 ml golden syrup
54g	36 g light brown sugar

Work out the amount of each ingredient needed to make **15** Flapjacks.

Here is a list of ingredients for making **10** Flapjacks.

Ingredients for 10 Flapjacks
80 g rolled oats
60 g butter
30 ml golden syrup
36 g light brown sugar

If I have:
240g of rolled oats,
150g of butter,
150ml of golden syrup
360g of light brown sugar,
what is the largest number of flapjacks I can make?

25

FOLLOW-UP WORK hegartymaths Clips 339-341, 343-345, 348, 739-742 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Proportion

Density

A piece of wood has a mass of 8g and a volume of 10cm³.
Work out the density of the wood.

0.8 g/cm³

What is the volume of a piece of metal that has a mass of 300g and density of 6g/cm³?

50cm³

The mass of 3m³ of tin is 21840kg.

(a) Work out the density of tin.

7280 kg/m³

A piece of plastic has a density of 1.3g/cm³ and a volume of 100cm³.
Work out the mass of the piece of plastic.

130g

FOLLOW-UP WORK hegartymaths Clip 725-729 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Speed and Density

Speed

A car drives 120 miles in 3 hours.

Calculate the average speed, in mph, of the car.

40 mph

The distance between two cities is 2898 miles.
The plane journey took 6 hours.

Calculate the average speed of the plane.

483 mph

Harry cycles 8 kilometres in 30 minutes.

Calculate his average speed, in km/h.

16km/h

Thomas drove from Junction 2 to Junction 3 on a road.
The distance between the junctions is 12 miles and it takes 15 minutes.

Hannah also drove from Junction 2 to Junction 3 on the same road.
She drove at an average speed of 50 mph.

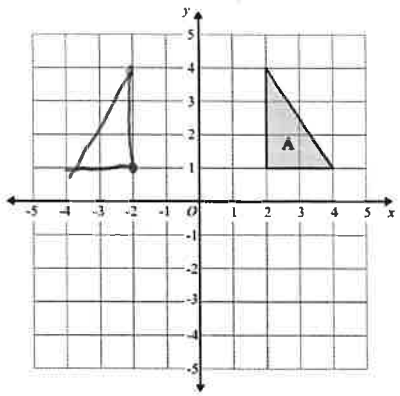
Who has the faster speed?
Explain your answer. Hannah by 2mph

FOLLOW-UP WORK hegartymaths Clip 716-724 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Speed and Density

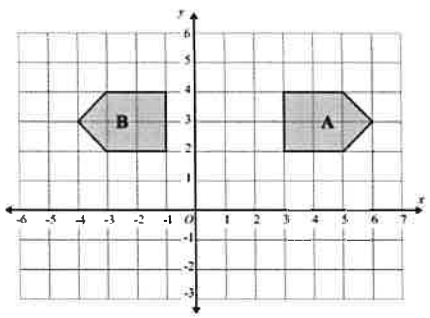
Section E: Geometry

Geometry and measures	
Shape	Reflection
	Plan and elevation
Angles	Angles in a polygon
Length, area and volume	Volume of a cube
	Volume of a cylinder
Pythagoras's Theorem and Trigonometry	Exact trigonometric values

Reflection



Reflect triangle A in the y-axis.



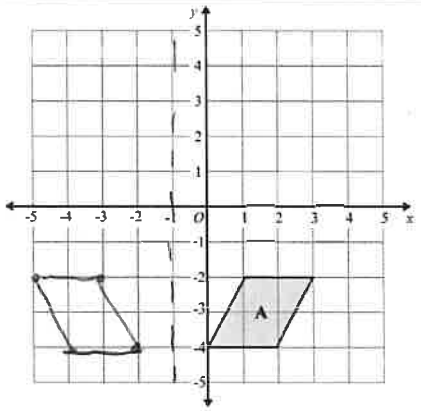
Describe fully the single transformation that maps shape A onto shape B.

reflect in line $x = 1$

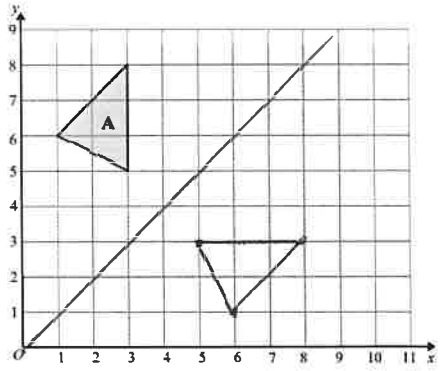
FOLLOW-UP WORK hegartymaths Clips 639-641

https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Reflections

Reflection



Reflect shape A in the line with equation $x = -1$

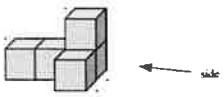


Reflect triangle A in the line $y = x$

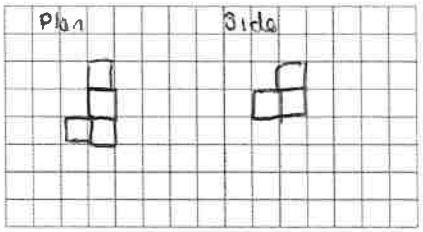
FOLLOW-UP WORK hegartymaths Clips 639-641 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Reflections

Plans & Elevation

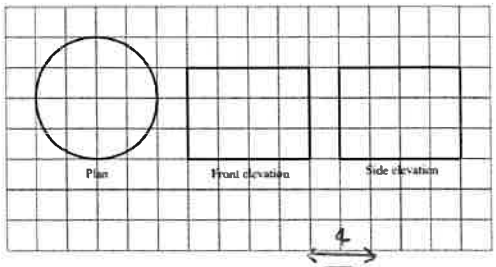
The diagram shows a solid made from centimetre cubes.



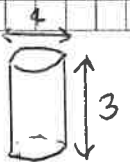
On the centimetre grid below draw the plan and the side elevation for the solid.



The diagram shows the plan, front elevation and side elevation of a solid shape, drawn on a centimetre grid.



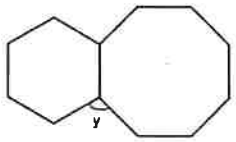
In the space below, draw a sketch of the solid shape.
Give the dimensions of the solid on your sketch.



FOLLOW-UP WORK hegartymaths Clips 837-844 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Plans and Elevations

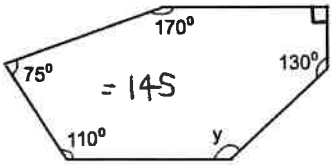
Angles in Polygons

The following shapes are regular polygons. Find the value of y.



= 105

Find the value of y.



= 145

The sum of interior angles of a polygon is 7380°. How many sides does the polygon have?

43

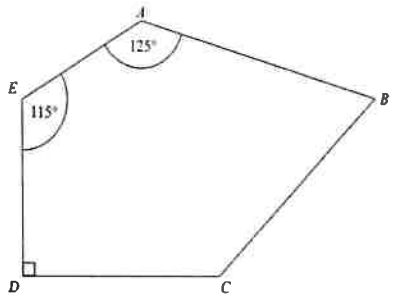
A regular polygon has an exterior angle of 45°. How many sides does the shape have?

8

A regular polygon has an interior angle of 120°. How many sides does the shape have? 6

Angles in Polygons

ABCDE is a pentagon.

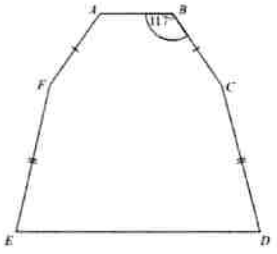


Angle *BCD* = 2 × angle *ABC*

Work out the size of angle *BCD*.
You must show all your working.

140

The diagram shows a hexagon.
The hexagon has one line of symmetry.



FA = *BC*
EF = *CD*
Angle *ABC* = 117°

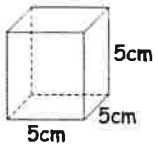
Angle *BCD* = 2 × angle *CDE*

162

Work out the size of angle *AFE*.
You must show all your working.

Volume

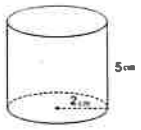
Shown below is a cube of side 5cm



125cm3

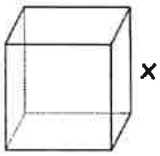
Work out the volume of the cube
State the units of your answer.

Below is a cylinder with radius 2cm and height 5cm.



20π

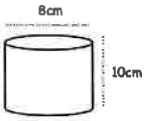
Calculate the volume of the cylinder.
Give your answers in terms of π



3cm

The volume of the cube is 27cm³.
Find x.

Below is a cylinder with diameter 8cm and 10cm



160π

Find the volume of the cylinder.
Give your answer in terms of π

FOLLOW-UP WORK hegartymaths Clips 568-569, 572-574 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Volume of a prism; Cylinders

Exact Trigonometric Values

YOU MUST LEARN THESE!!!

	0°	30°	45°	60°	90°
sin	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
cos	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
tan	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	–

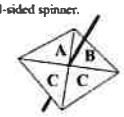
FOLLOW-UP WORK hegartymaths Clip 845 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html
Exact Trig Values

Section F: Probability

Probability	
Probability	Probability
	Frequency tree

Probability

Stevie spins a fair 4-sided spinner.



(a) On the probability scale mark with a cross (X) the probability that the spinner lands on A.

(b) Write down the probability that the spinner lands on C. 1/2

The probability of Barry winning a Badminton match is $\frac{3}{8}$ 5/8

Work out the probability that Barry does not win a Badminton match.

(1 mark)

The probability of Timmy winning a Tennis match is 0.7. 0.3

Work out the probability that Timmy does not win a Tennis match.

(1 mark)

There are 30 pens in a box.
12 of the pens are black.
7 of the pens are green.
The rest of the pens are red. 11/30

One of the pens is chosen at random.
Find the probability that the pen is red.

There are red counters, blue counters, yellow counters and green counters in a bag.

A counter is picked at random from the bag.

The table shows the probabilities that the counter will be red, will be blue and will be yellow.

Colour	Red	Blue	Yellow	Green
Probability	0.2	0.4	0.3	0.1

Complete the table to show the probability that the counter will be green.

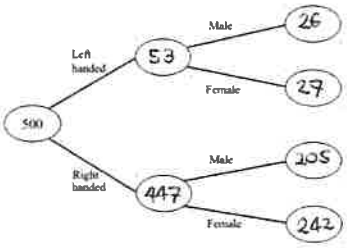
FOLLOW-UP WORK hegartymaths Clips 349-363 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html Probability

Frequency Tree

500 people were surveyed.
All of the people were either left handed or right handed.

53 of the people are left handed.
26 males are left handed.
231 of the people are male.

(a) Use this information to complete the frequency tree.



(3)

One of the left handed people is chosen at random.

(b) Write down the probability that this person is female. (2)

27/53

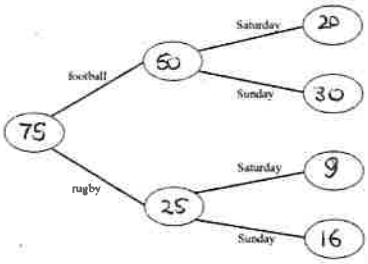
75 students either go to a football club or a rugby club at the weekend.
Each student either goes to the club on Saturday or Sunday.

50 of the students go to a football club.

$\frac{3}{5}$ of the students that go to a football club go on Sunday.

46 students go to their club Sunday.

Use this information to complete the frequency tree.



FOLLOW-UP WORK hegartymaths Clips 368-369 https://www.mathsgenie.co.uk/gcse-may-june-2022-foundation-topics.html