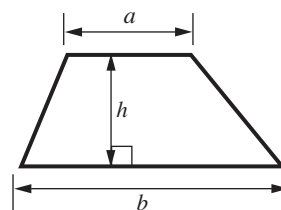
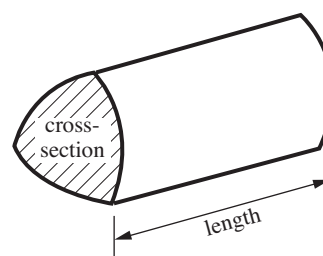


Formulae Sheet

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



Volume of prism = (area of cross-section) \times length



PLEASE DO NOT WRITE ON THIS PAGE

- 9 A manufacturer makes cars using **one** of two engine types and **one** of four body types.

<u>Engine</u>	<u>Body</u>
petrol (P)	saloon (S)
diesel (D)	hatchback (H)
	estate (E)
	coupe (C)

- (a) Complete the table to show all the different types of cars that can be made. The first one has been done for you.

*You may not
need to use all
the lines.*

Engine	Body
P	S

[2]

- (b) The manufacturer takes one of each type of car to a show. One of these cars is selected at random.

What is the probability that this car has a petrol engine and a saloon body?

(b) [1]

3

10 Here are the names of some quadrilaterals.

square

rectangle

kite

trapezium

parallelogram

rhombus

(a) Which two of these quadrilaterals have four equal sides?

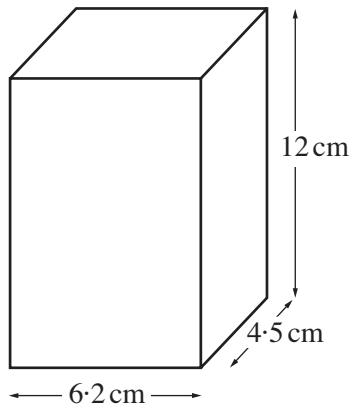
(a) [1]

(b) Which one of these quadrilaterals has exactly **one** pair of parallel sides?

(b) [1]

2

11



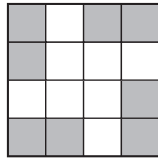
Calculate the volume of this cuboid.

..... cm^3 [2]

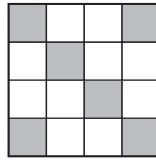
2

12 (a) Which of these patterns have **rotation** symmetry?

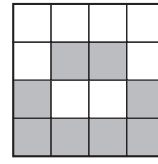
Write Yes or No
under each
diagram



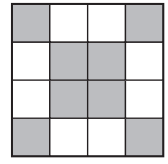
.....



.....



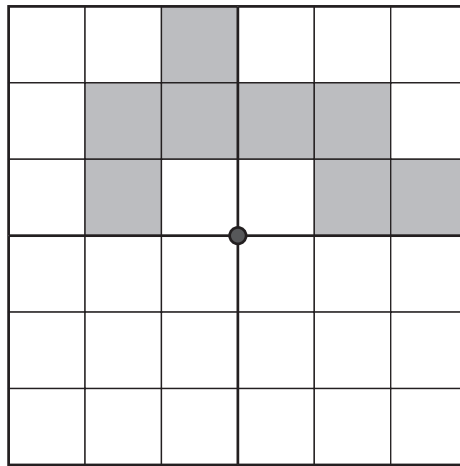
.....



.....

[2]

(b) Shade 8 small squares so that this pattern has rotation symmetry of order 4 about its centre.



[2]

4	

13 Three pupils were asked to work out the value of $5x^2$ when $x = 10$.

These are their answers.

Rob: $5x^2 = 100$

Sarah: $5x^2 = 2500$

Tamsin: $5x^2 = 500$

Which pupil is correct? Explain why this pupil is correct.

..... because

.....

..... [2]

2	

- 14 (a) Melton Rovers Football Club ended the last 8 seasons with these points.

50	67	43	52
45	48	71	64

Work out the mean number of points.

(a) [3]

- (b) Last season Melton Rovers played the same number of games at home as away.
Here is a summary of the goals scored last season.

	Home	Away
Mean	2.3	1.2
Range	3	5

Barry says that they scored more goals at home than away.

Use this table to explain how you can tell this statement is true.

.....

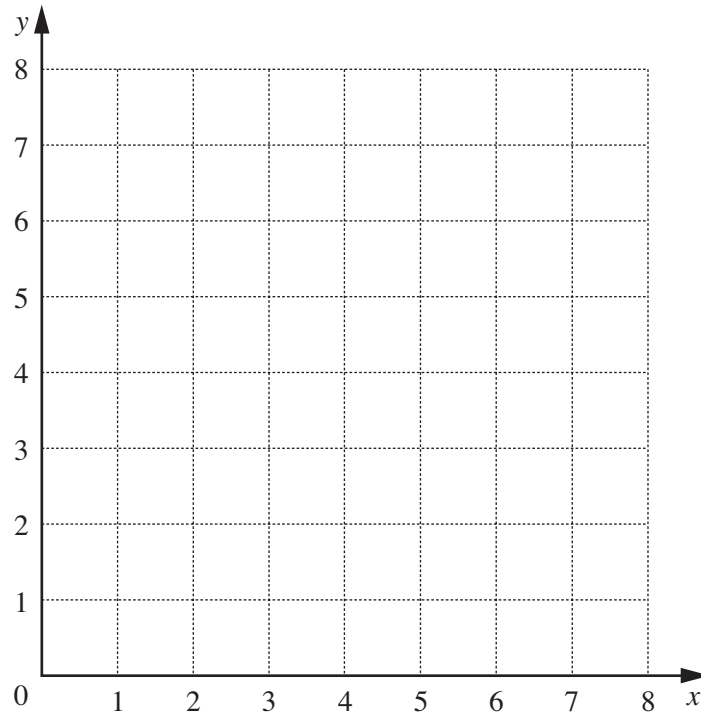
..... [1]

15 (a) Complete the table for $y = x + 4$.

x	0	1	2	3
y	4			

[1]

(b) Draw the graph of $y = x + 4$.



[2]

3	

TURN OVER FOR QUESTION 16

- 16 A local council asked all 420 adults in a village which of these they wanted most. The results are shown below.

	Percentage
By-pass	55
Leisure Centre	23
Library	15
Bus Shelter	7

The local paper asked the 420 adults the same question.



How many **more** adults did the paper find in favour of the by-pass than the local council?

You must show your working.

..... [5]

5	
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