Silver Level

Question Paper 1

Level	IGCSE
Subject	Maths
Exam Board	Edexcel
Difficulty Level	Silver
Booklet	Question Paper 1

Time Allowed: **59 minutes**

Score: **/49**

Percentage: **/100**

Grade Boundaries:

9	8	7	6	5	4	3	2	1
>90%	80%	70%	60%	50%	40%	30%	20%	<20%

1 Ella invested $8000 for 3 years at 5% per annum **compound interest**.

Calculate the value of her investment at the end of 3 years.

$ .....

(Total for Question 1 is 3 marks)

2 The table shows information about the weights of 80 parcels.

Weight (w kg)	**Frequency**
$0 < w \leqslant 2$	8
$2 < w \leqslant 4$	14
$4 < w \leqslant 6$	26
$6 < w \leqslant 8$	17
$8 < w \leqslant 10$	10
$10 < w \leqslant 12$	5

(a) Work out an estimate for the total weight of the 80 parcels.

..... kg

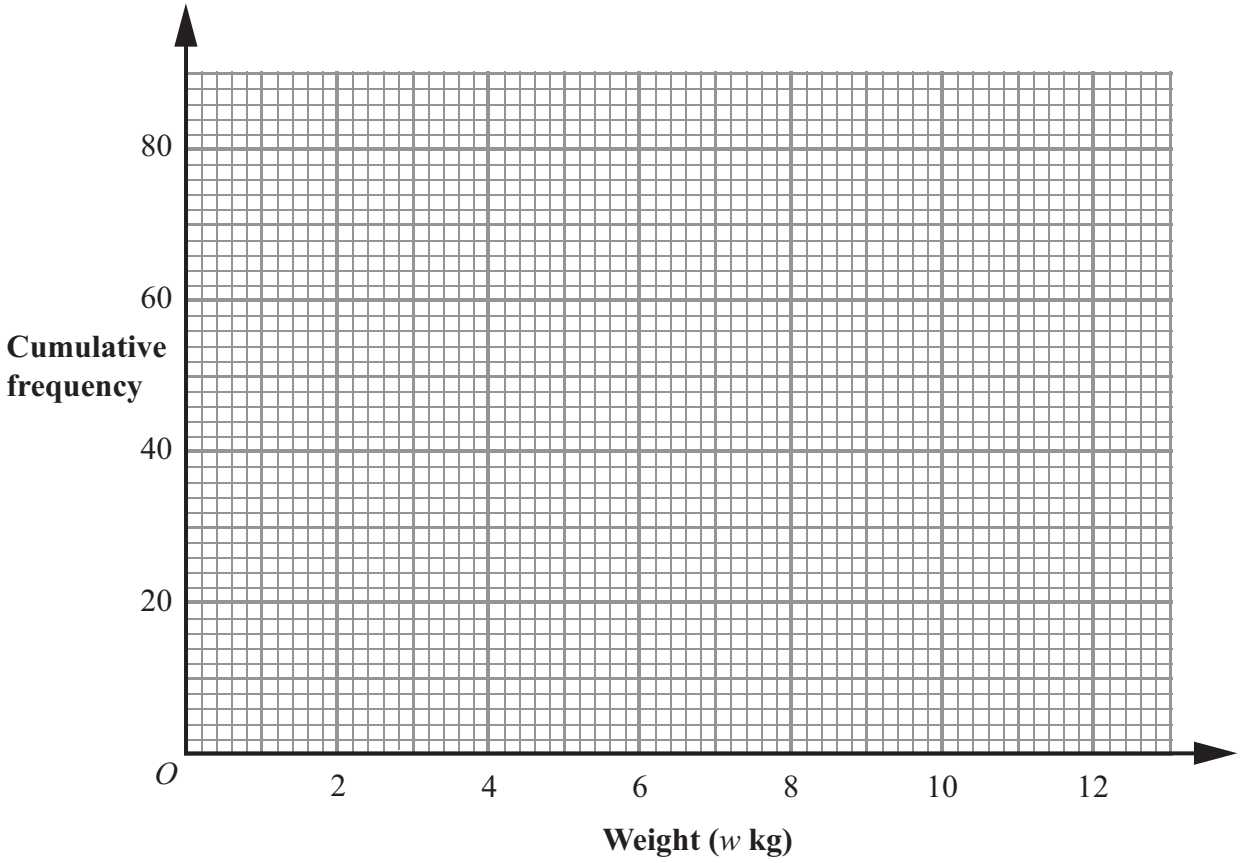
(3)

(b) Complete the cumulative frequency table.

Weight (w kg)	**Cumulative frequency**
$0 < w \leqslant 2$	
$0 < w \leqslant 4$	
$0 < w \leqslant 6$	
$0 < w \leqslant 8$	
$0 < w \leqslant 10$	
$0 < w \leqslant 12$	

(1)

(c) On the grid, draw a cumulative frequency graph for your table.



(2)

(d) Use the graph to find an estimate for the number of parcels which weighed less than 5.2 kg.

.....

(2)

(Total for Question 2 is 8 marks)

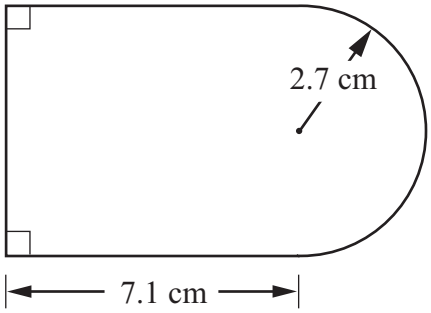
3 Solve $\frac{2x-1}{4}+\frac{x-1}{5}=2$

$x =$ .....

(Total for Question 3 is 4 marks)

4 (a) Here is a shape made from a rectangle and a semicircle.

Diagram **NOT** accurately drawn



The length of the rectangle is 7.1 cm.
The radius of the semicircle is 2.7 cm.

Work out the area of the shape.
Give your answer correct to 3 significant figures.

..... cm^2

(4)

(b) Here is another shape made from a rectangle and a semicircle.

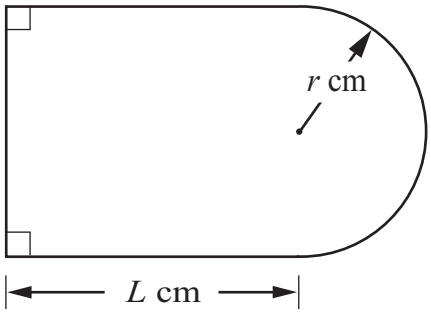


Diagram **NOT** accurately drawn

The length of the rectangle is L cm.
The radius of the semicircle is r cm.

The perimeter, P cm, of the shape is given by the formula

$$P = \pi r + 2L + 2r$$

Make r the subject of the formula $P = \pi r + 2L + 2r$.

$r =$ .....

(3)

(Total for Question 4 is 7 marks)

5 Here are seven counters.
Each counter has a number on it.

Ali puts the seven counters in a bag.
He takes, at random, a counter from the bag and does **not** replace the counter.
He then takes, at random, a second counter from the bag.

Calculate the probability that

(i) the number on the second counter is 2 more than the number on the first counter,

.....

(ii) the number on the second counter is 1 more than the number on the first counter.

.....

(Total for Question 5 is 5 marks)

6

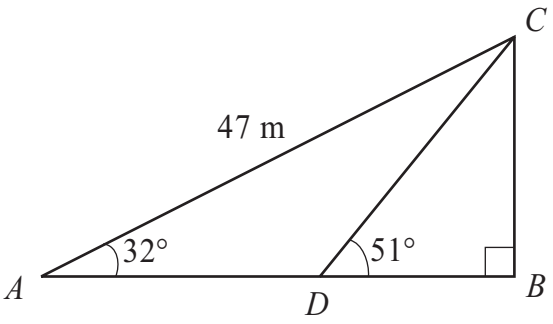


Diagram **NOT** accurately drawn

Triangle ABC is right-angled at B.
Angle $BAC = 32°$
$AC = 47$ m.
D is the point on AB such that angle $BDC = 51°$

Calculate the length of BD.
Give your answer correct to 3 significant figures.

..... m

(Total for Question 6 is 5 marks)

7 The diagram shows a trapezium $PQRS$.

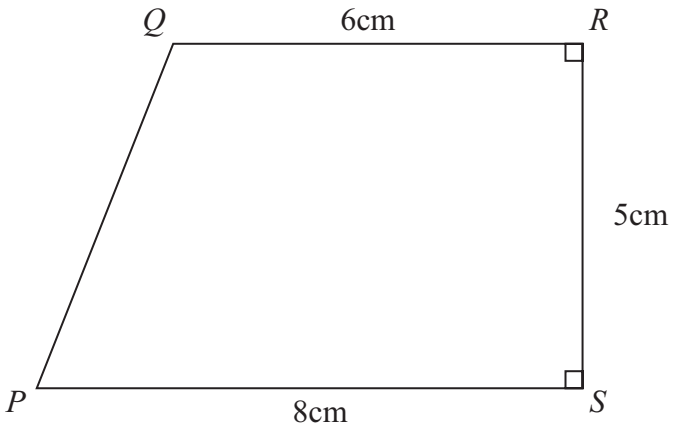


Diagram **NOT** accurately drawn

(a) Calculate the area of the trapezium $PQRS$.

..... cm^2

(2)

(b) Calculate the length PQ.
Give your answer correct to 3 significant figures.

..... cm

(4)

(Total for Question 7 is 6 marks)

8 Six numbers have a mean of 5

Five of the numbers are

3 2 7 6 2

The other number is x.

Work out the value of x.

$x =$ .....

(Total for Question 8 is 3 marks)

9 (i) Solve the inequality $2x + 13 \geqslant 6$

.....

(ii) n is a **negative** integer.
Write down all the values of n which satisfy $2n + 13 \geqslant 6$

.....

(Total for Question 9 is 4 marks)

10 The table gives the diameters, in metres, of four planets.

Planet	Diameter (metres)
Mercury	4.88×10^6
Venus	1.21×10^7
Earth	1.28×10^7
Mars	6.79×10^6

(a) Which planet has the largest diameter?

.....

(1)

(b) Write 6.79×10^6 as an ordinary number.

.....

(1)

(c) Calculate the difference, in metres, between the diameter of Venus and the diameter of Mercury.

Give your answer in standard form.

..... metres

(2)

(Total for Question 10 is 4 marks)