Section 1   **Computation**   **(20 Marks)**

Answer *ALL* the questions in this section. Clearly show ALL your working in the space provided.

1. Here are 4 number cards:

| 5 | 9 | 2 | 4 |

(a) Arrange the 4 cards together to make

   the largest possible odd number.

   _____

(2 marks)

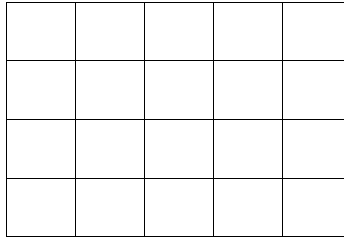(b) Putting only 2 of the cards together, what is the largest possible square number?

   _____

(2 marks)

(c) Arrange the number cards to construct a subtraction problem to give the largest possible answer.
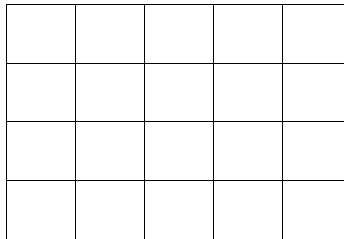
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(2 marks)

2. (a) Shade in $\frac{3}{5}$ of the shape below.

(2 marks)

(b) Shade in 70% of the shape below.

(2 marks)

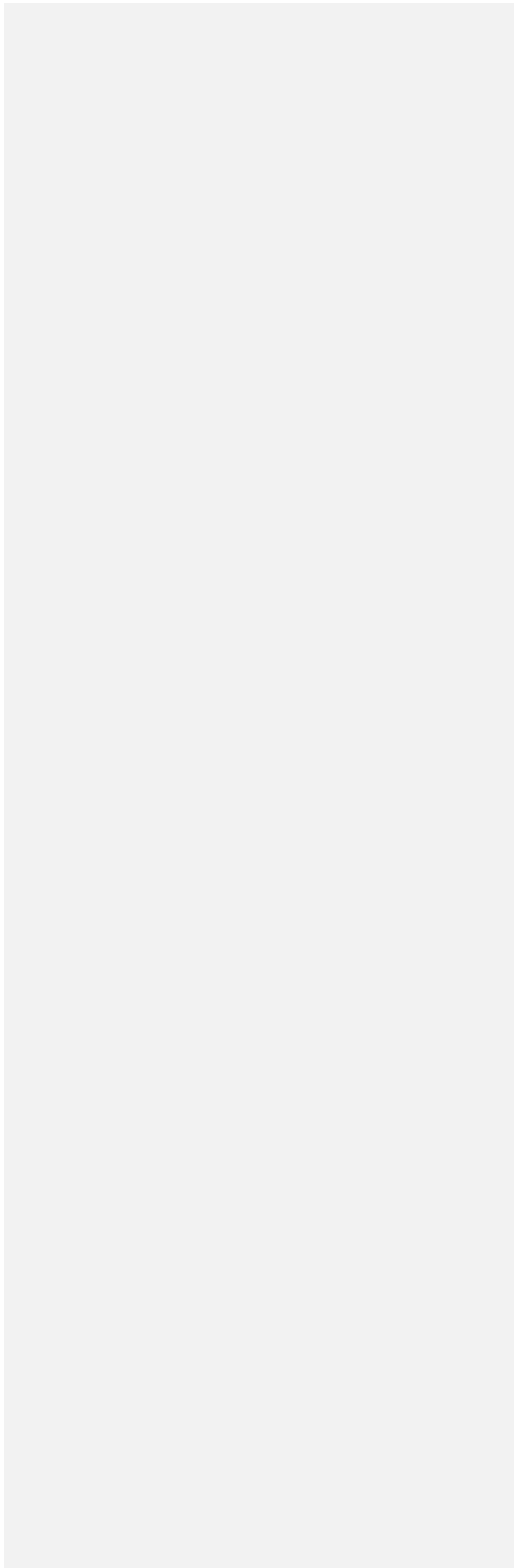(c) Which is bigger $\frac{3}{5}$ or 70%?

   _____

(1 mark)

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3. In a race, the 4 fastest people were John, Charles, Dave and Vince.

Use the following information to work out the order in which they finished:

➢   John was faster than Dave.
➢   Charles was faster than Vince.
➢   Dave finished 2 places after Charles.
➢   Vince was not in 3rd place.

o   1st place   _____

o   2nd place   _____

o   3rd place   _____

o   4th place   _____

(4 marks)

4. In a survey of 40 people, 23 were males. Of the females, 15 were born in Antigua. Altogether, 28 people were born in Antigua. Some of this information has been put into the table below. Complete the table.

	Male	Female	Total
Born in Antigua		15	28
Not born in Antigua			
Total	23		40

(5 marks)

Section 2   **Problem- Solving**   **(30 Marks)**
Answer *ANY THREE* questions in this section. Clearly show **ALL** your working in the space provided after each question.   (10 marks each)

5.

(a) The number machine below changes numbers according to the rule: subtract 3 then multiply by 2.

Input → | - 3 | → | × 2 | → **Output**
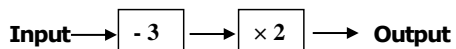
i.   Complete the input and output table for this machine.

Input	Output
10	14
7	
	34
	0

(3 marks)

ii.   There is one number where the output is the same as the input.

What is the number?

_____

(2 marks)

(b) A different machine produces the input and output table below:

Input	Output
2	6
4	7
8	9
12	11

What is the rule for this number machine?

_____

_____

_____

(2 marks)

(c) Study the pattern of circles and draw the 4th pattern.

OO O	OOO OO O	OOOO OOO OO O	
1st	**2nd**	**3rd**	**4th**

(3 marks)

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6.   Below are some shapes drawn on a centimetre-squared grid.
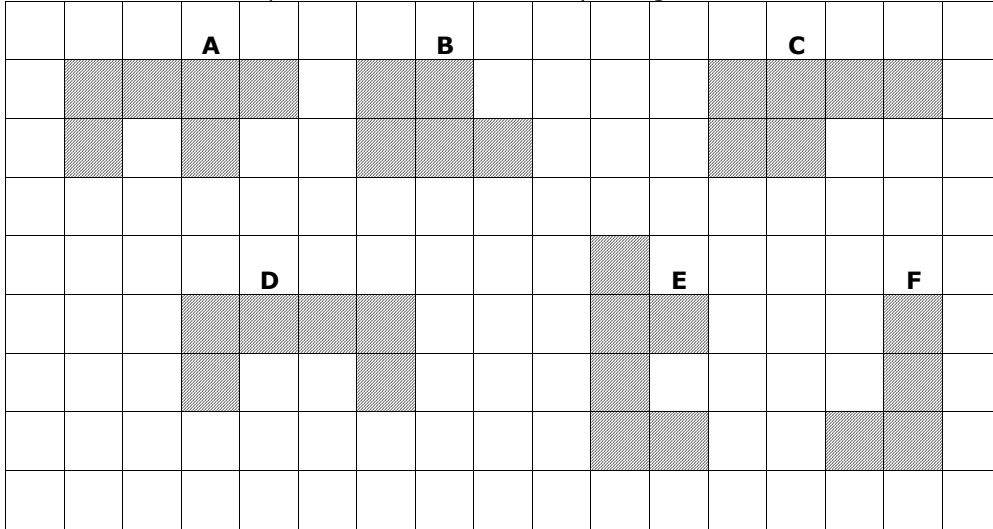
(i)   What is the perimeter of shape E?   _____
                                                                                    (2 mark)

(ii) Which 2 shapes will fit together to form a square?   _____ and _____
                                                                                    (2 marks)

(iii) What is the area of the square formed?   _____
                                                                                    (2 marks)

(iv) Which two shapes will fit together to form a rectangle? _____ and _____
                                                                                    (2 marks)

(v) What is the perimeter of the rectangle formed? _____
                                                                                    (2marks)

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7.

(a) Kenny is making cupcakes. A recipe to make 24 cupcakes requires the following ingredients:

230 grams	Flour
150 grams	Butter
280 grams	Sugar
4	Eggs

i. How much flour is needed to make 12 cupcakes?

_____
(2 marks)

ii. Kenny decides to make 36 cupcakes. How much sugar does Kenny need?

_____
(2 marks)

iii. The chocolate icing for 24 cupcakes uses 60g of cocoa powder. Kenny decides to put chocolate icing on only half of his 36 cupcakes.

How much cocoa powder does he use?

_____
(2 marks)

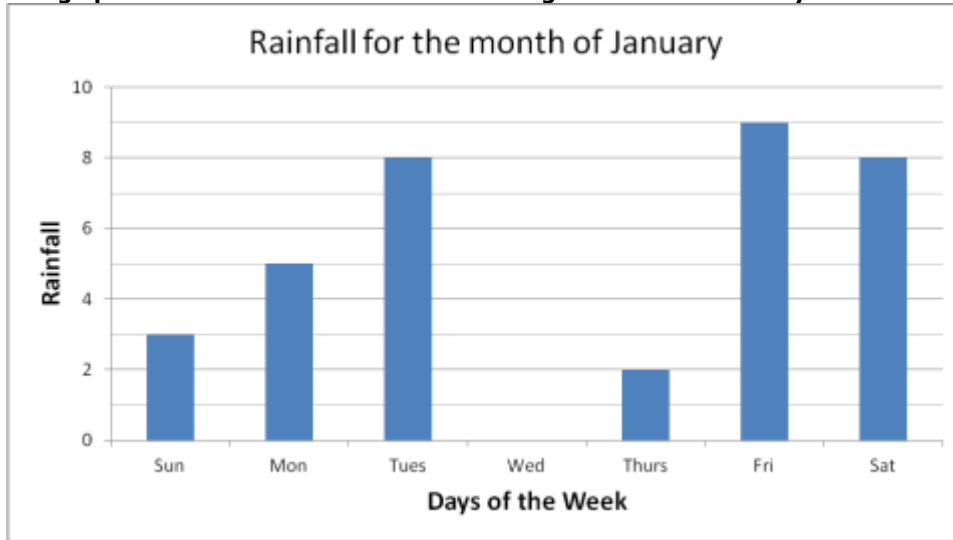(b) Sandra bought a television for $1800.00 and sold it for $1200.00

i. What was her loss?

_____
(2 marks)

ii. What was her loss as a fraction of the cost price? (Reduce your answer to its lowest term).

_____
(2 marks)

8.
This graph shows the amount of rainfall in Jennings for a week in January.

Rainfall for the month of January

(a) Which was the wettest day of the week?

_____
(1 mark)

(b) What was the rainfall on Wednesday?

_____
(1 mark)

(c) Which two days had the same amount of rainfall?

_____ and _____
(2 marks)

(d) How much rain fell during the whole week?

_____
(2 marks)

(e) What was the average rainfall for this week?

_____
(2 marks)

(f) If $\frac{1}{3}$ of the January rainfall fell during this week, what was the total rainfall for January?

_____
(2 marks)

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_____

9.

When Helen hangs out her washing on the line, she always uses 3 clothes-pins for a shirt and 2 clothes-pins for a jumper.

(a) On Monday, Helen hangs 8 shirts and 4 jumpers on the washing line.

How many clothes-pins does she use?

_____
(3 marks)

(b) On Wednesday, Helen hangs 5 shirts and some jumpers on the line. She uses 21 clothes-pins altogether.

How many jumpers does Helen hang on the line?

_____
(2 marks)

(c) On Friday, Helen uses 65 clothes-pins. She hangs an equal number of shirts and jumpers on the line.

How many shirts does she hang on the washing line on Friday?

_____
(3 marks)

(d) Helen's mother washes her white socks. She uses one clothes-pin for each sock. If she hangs 6 pairs of socks on the line how many clothes-pins does she use?

_____
(2 marks)

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END OF TEST