Saint Theresa College

PARVA PARVORUM PULCH

| **YEAR** | **MATHEMATICS** | **TIME: 1hr 15min** |

Mental Mathematics Mark	
Main Paper Mark	
Total Mark	

READ CAREFULLY:

- **WORK OUT ALL THE QUESTIONS.**

- **SHOW ALL YOUR WORKING.**

- **WRITE YOUR ANSWER CLEARLY.**

1.   Write in the missing numbers:

a. [   ] 21 b.   X 4 [   ]

                    ++

c.   225 - [   ] : 150   d. - 73 : [   ]

_____

2 (a)   Hayley makes a sequence of numbers.

        Her rule is **'find half the last number and then add 10'**

        Write the next two number in her sequence.

        36   28   24   [   ]   [   ]

2(b) Which of these numbers give 80 when rounded to the nearest **10**?

       Circle the numbers.

              84   87   72   76   90

_____

3.   Write these lengths in order, starting with the **shortest**.

       ½ m   3.5 cm   25 mm   20 cm

       [   ]   [   ]   [   ]   [   ]

       shortest

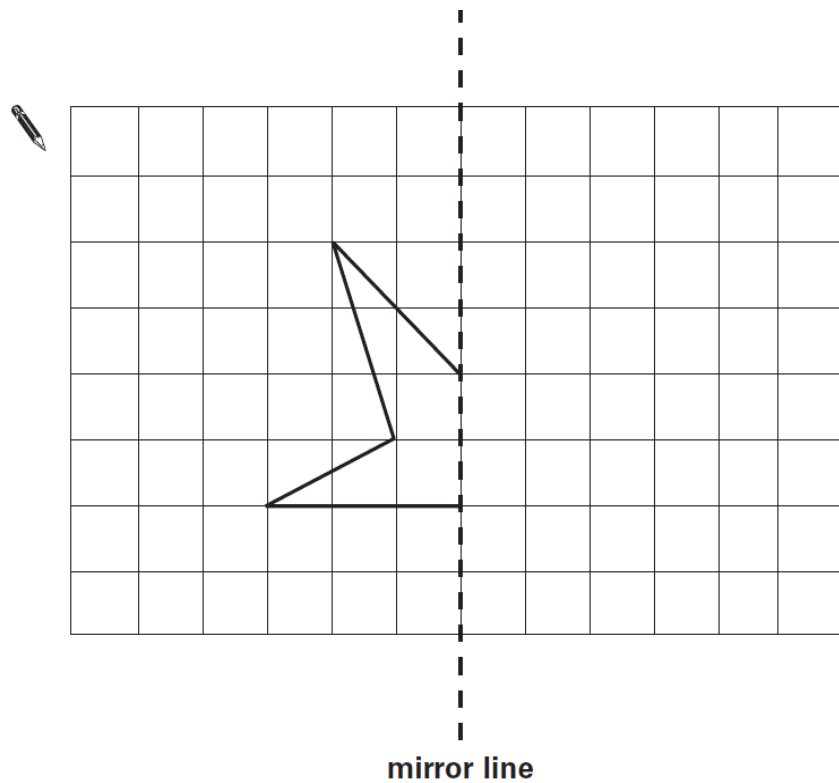4(a) Complete the diagram below so that the three numbers in each line
       add up to **150.**

4 (b)   The diagram shows distances on a train journey from Exeter to York. How many kilometres is it altogether from Exeter to York.
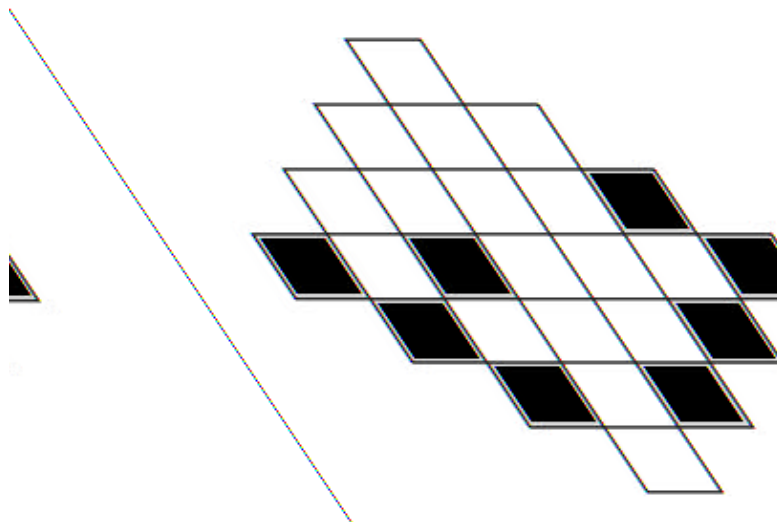
York

Derby

106 km

Bristol

215 km

Exeter

130 km
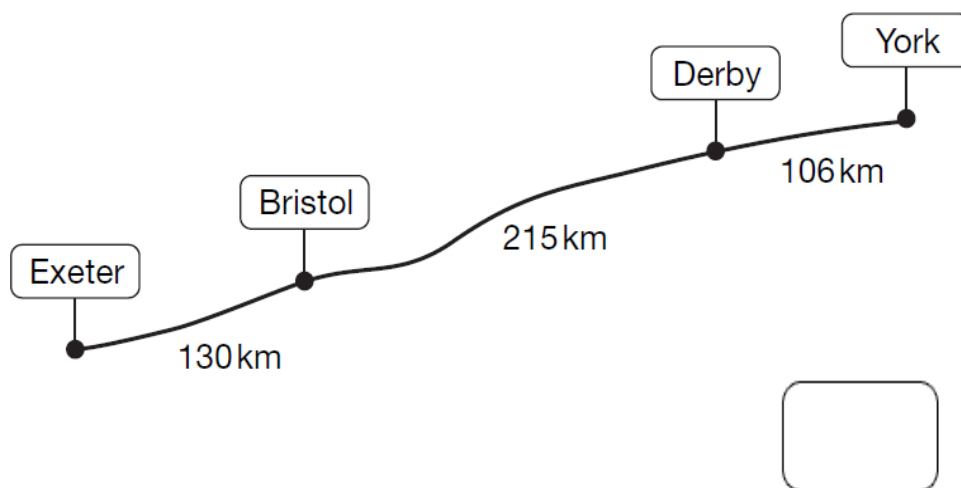
5. (a)   Complete the diagram below to make a shape that is symmetrical about the mirror line.
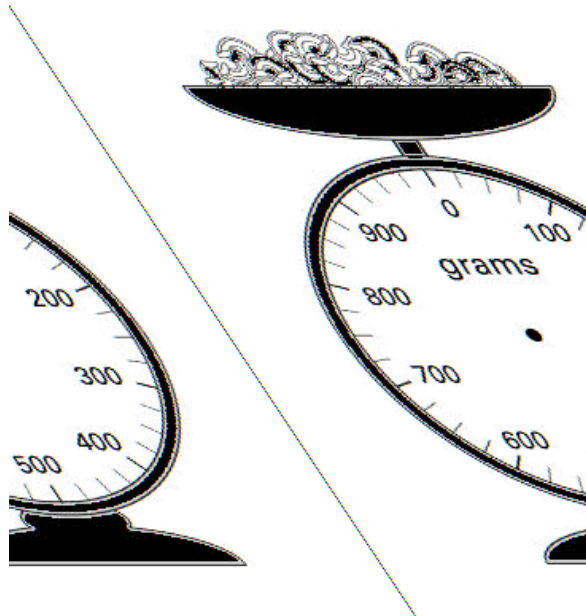
Use a ruler.

mirror line

5(b)   Here is a grid with eight squares shaded in.
        Shade in **two more squares** to make a symmetrical pattern.

6 (a)   Tom is cooking pasta. He weighs 350 grams of pasta.
         Draw an arrow on the scale to show 350 grams.

6 (b)   A packet contains 1.5 kilograms of guinea pig food.
        Tom feeds his guinea pig 30 grams of food each day.

        How many **days** does the packet of food last?

7 (a)   Karen makes a fraction using her number cards.
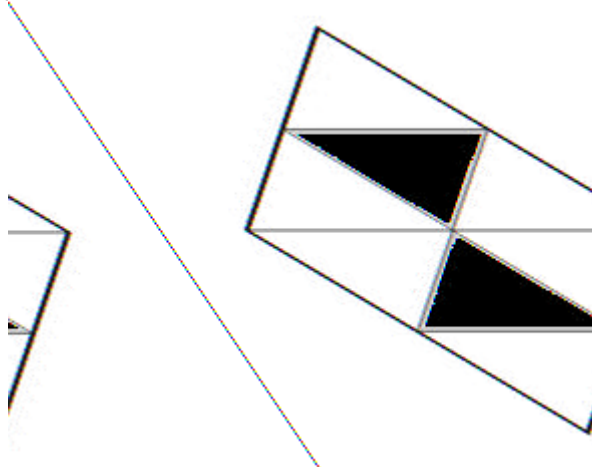   She says, **'My fraction is equivalent to ½**

One of the number cards is 6 ’.

What could Karen's fraction be?
Give **both possible** answers.

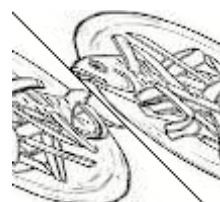7 (b) Here is a square. What fraction of the square is shaded?

8.   These are the prices in a fish and chip shop.

| Fish…………………………….€ 1.95c |
| Chips .... small bag .... 55c |
| Chips .... large bag ...... 70c |
| Peas .... 38c |

(a)   Luke has € 3.
He wants to buy one fish, peas and two large bags of chips.
How much **more** money does he need?

(b)   What change will Moira get from € 5 after buying **one fish** and **two large bags of chips**?

___

9(a)   An isosceles triangle has a **perimeter of 12cm**. One of its sides is 5cm.
What could the length of each of the other two sides be?

Two different answers are possible.
Give both answers.

and

(b)   A square has also a **perimeter of 12cm**.
What is one side of the square?

10.   A shop kept a tally chart to show what flavours of milk shake they sold.

Look at the following tally chart and then answer the questions.

|	Number of children	Number of adults
chocolate	ҬҤҴ ҬҤҴ ҬҤҴ ᵢᵢ	ҬҤҴ ҬҤҴ ᵢᵢᵢ
strawber	www.StudentBounty.com	ҬҤҴ ҬҤҴ

(a) How many **children** bought a **lemon** milk shake?

(b) **Altogether**, how many **people** bought a **strawberry** m_____?

(c) How many **more adults than children** bought a **vanil**___ shake?

(d) How many **more children than adults** bought a choco___ shake?

(e) The **most preferred** milk shake flavour was

(f) How many **children** bought a **lemon** or an **orange** milk shake?

11.

A rectangular pool is **25 metres long** and **10 metres wide**.

length
25m
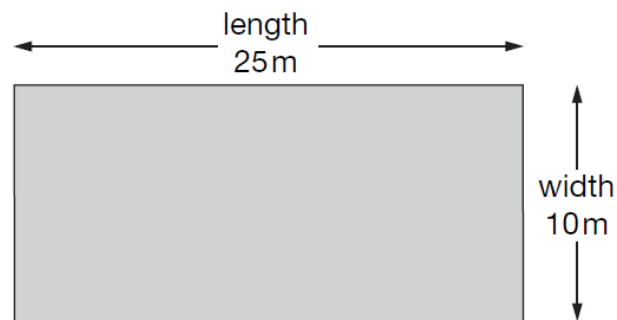
width
10m

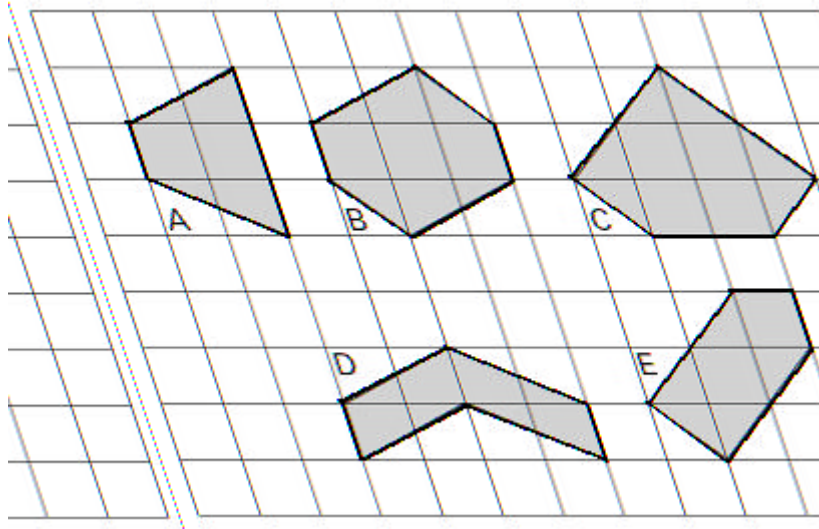David swims **5 lengths**.
Rosie swims **11 widths**.

(a)   How many metres does **David** swim?

(b)   How many metres does **Rosie** swim?

(c)   _____ swam the further.

(d)   By how many metres?

12.   Here are some shaded shapes on a square grid.

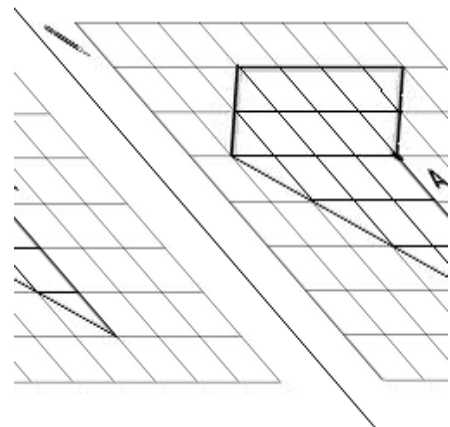a) Write the **letters** of the **two shapes** which are **hexagons**.

<div style="display:flex;gap:4em;">□ □</div>

(b) Write the **letters** of the **two shapes** which have **right angles**.

<div style="display:flex;gap:4em;">□ □</div>

(c) (i) Look carefully at the diagram.

The shaded shape is a □

(ii) Draw **two straight lines** from point A
to divide the shaded shape into a square
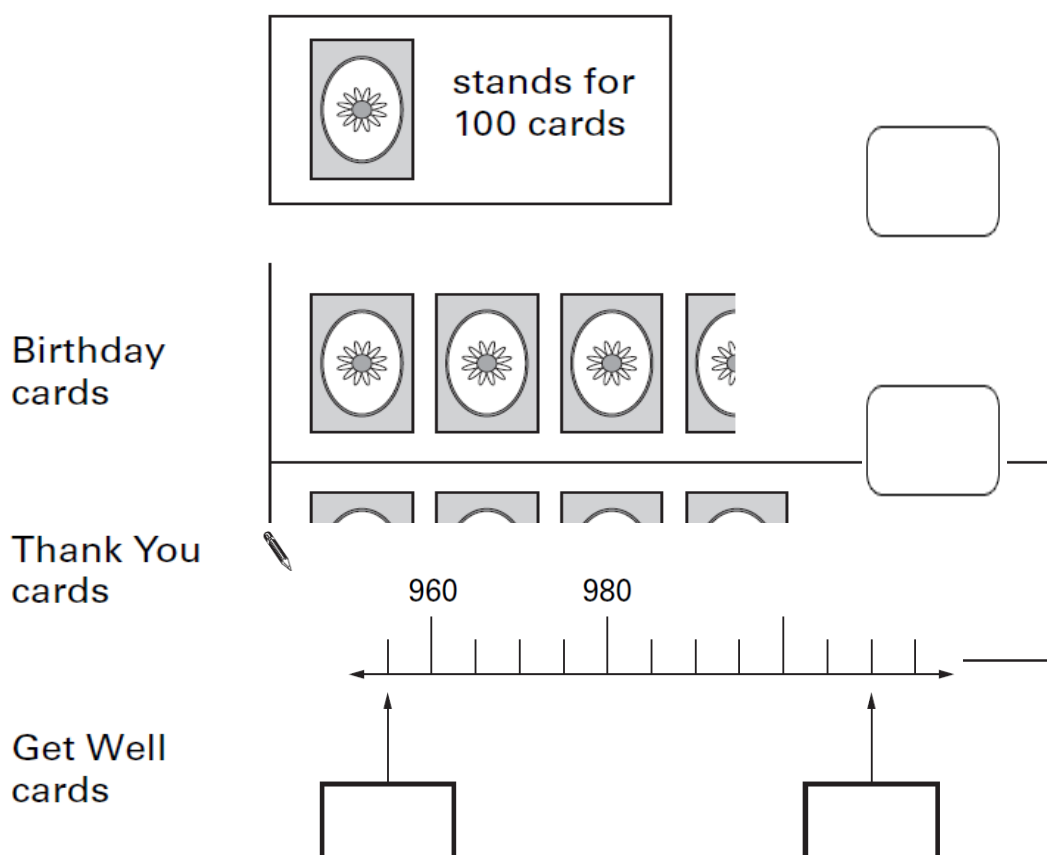and two triangles.
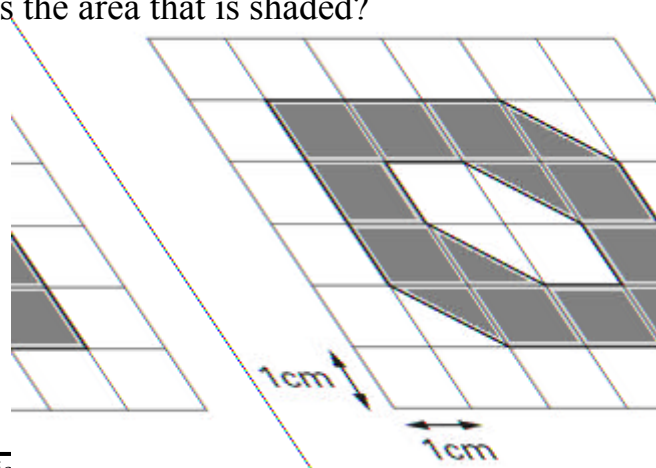
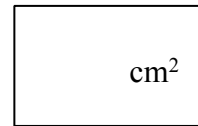13(a) Circle two cards which have a total of 10.

| 0.01 | 0.11 | 1.01 |

9.99

(b) A shop sells different kinds of greeting cards.
     The pictograph shows how many they sold in a
     week.

stands for
100 cards

Birthday
cards

Thank You
cards

960   980

Get Well
cards

14 (b) Here is a 1cm square grid. Some of the grid is shaded.
        What is the area that is shaded?

1cm

1cm

$$\boxed{} \text{cm}^2$$

14 (c) Match each decimal fraction to its equivalent fraction.
One has been done for you.

0.25 $\frac{3}{4}$

0.4 $\frac{2}{10}$
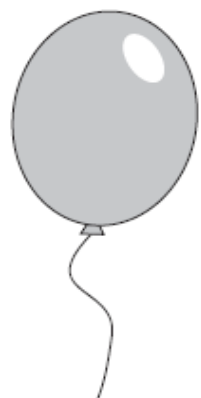
0.75 $\frac{1}{4}$

                        $\frac{2}{5}$

0.2

15.   There are **5 balloons** in a **packet**.
        There are **18 packets** in a **box**.

(a)   How many balloons are there **altogether** in
        a box?

(b)   There are **5 balloons in a packet**. Maria needs 75 balloons for her
        party. How many packets does she need?

(c)   Each packet of balloons cost **60c**. How much does Maria pay for all the packets?

16.

Ruth makes a fruit salad using bananas, oranges and apples.

For every one banana, she uses two oranges and 3 apples.

Ruth uses 24 fruits in all. How many oranges does she use?

END OF PAPER