



CITY OF LONDON
FREEMEN'S SCHOOL

SAMPLE ENTRANCE EXAMINATION PAPER

For pupils currently in Year 6

MATHEMATICS

- The test is 45 minutes long.
- You may not use a calculator.
- Write in ink, draw diagrams in pencil.
- Show your working and write your answers on the lines provided.
- You must show your working
- You will need a pencil and a ruler
- You will be given tracing paper

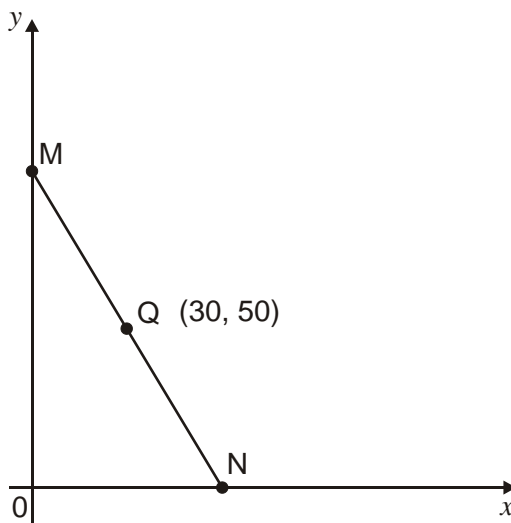
1. $3.7+5.7$ _____ (1)

2. $15.2-5.7$ _____ (1)


3. 254×6 _____ (1)

4. $342 \div 6$ _____ (1)

5. Q is the **midpoint** of line MN.
The coordinates of Q are (30, 50)



What are the coordinates of points **M** and **N**?

 M is (..... ,)

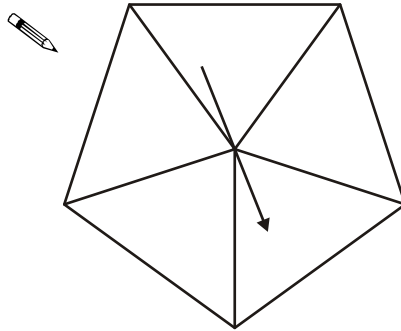
(1)

N is (..... ,)

(1)

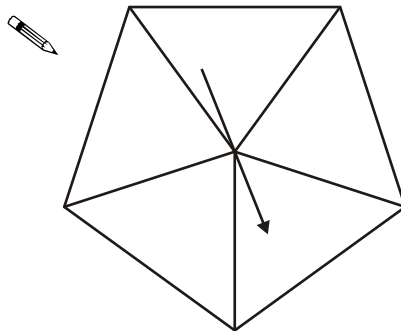
6. On each spinner **write five numbers** to make the statements correct.

It is **certain** that you will get a number **less than 6**



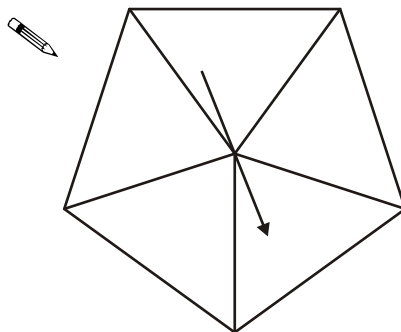
(1)

It is **more likely** that you will get an **even** number than an **odd** number.



(1)

It is **impossible** that you will get a **multiple of 3**



(1)

7. A meal in a restaurant costs the same for each person.
For **11** people the total cost is **£253**

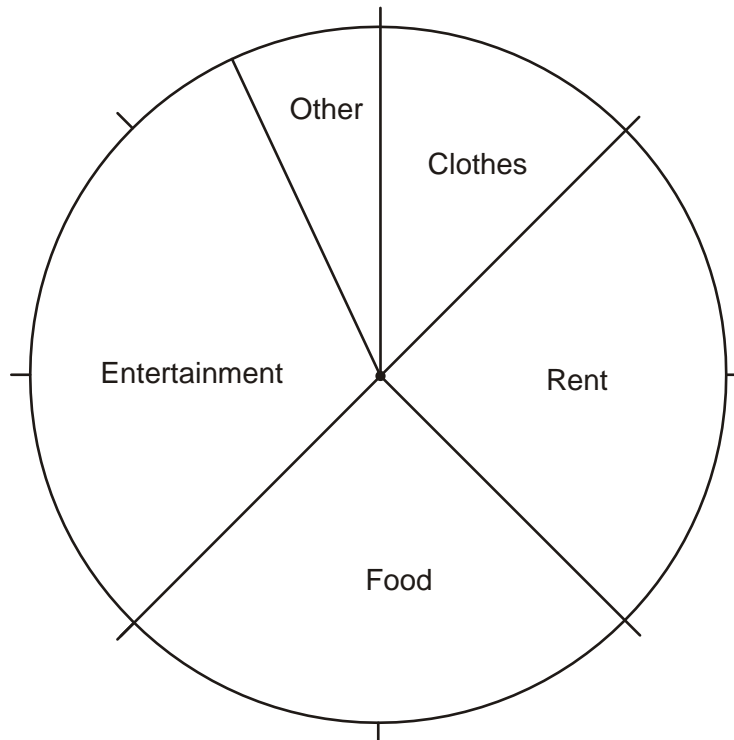
What is the total cost for 12 people? _____ (2)

8. **1976 v 2002**

Look at this information.

In 1976, a man earned £16 each week.

The pie chart shows how he spent his money.



- (a) How much did the man spend on **food** each week?

_____ (1)

(b) Now look at this information.

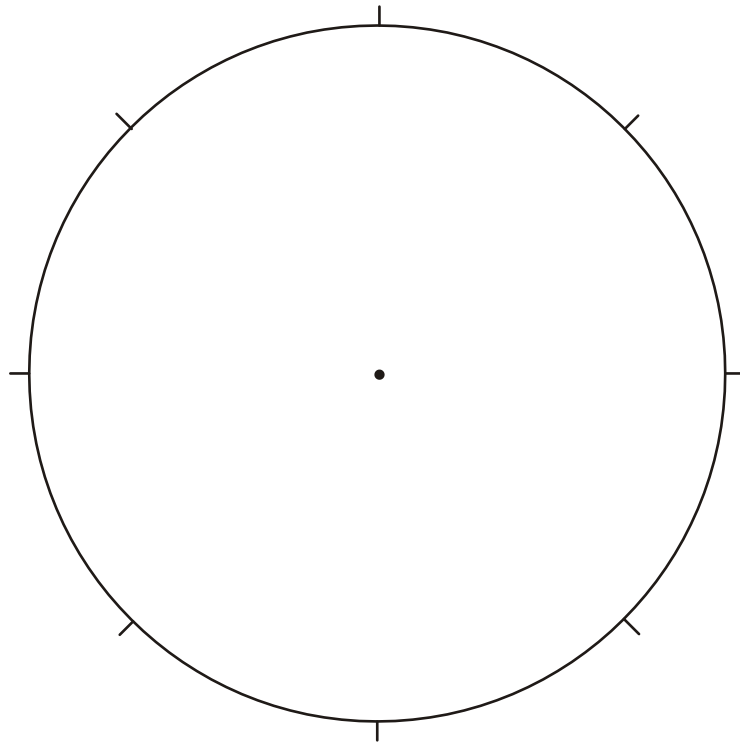
In 2002, a man earned £400 each week.

The table shows how he spent his money.

Rent	£200
Food	£100
Entertainment	£50
Other	£50

Complete the pie chart below to show how the man spent his money.

Remember to **label** each sector of the pie chart.



(2)

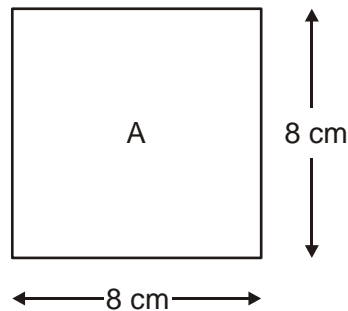
9. Calculate $-12 - 5 =$ _____ (1)

10. $6 - 18 =$ _____ (1)

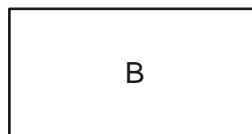
11. $-2 + 9 =$ _____ (1)

12. I have a square piece of paper.

The diagram shows information about this square labelled A.

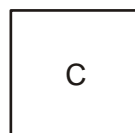


I fold square A **in half** to make rectangle B.



What is the perimeter of shape b? _____ (1)

Then I fold rectangle B **in half** to make square C.



What is the perimeter of square c? _____ (1)

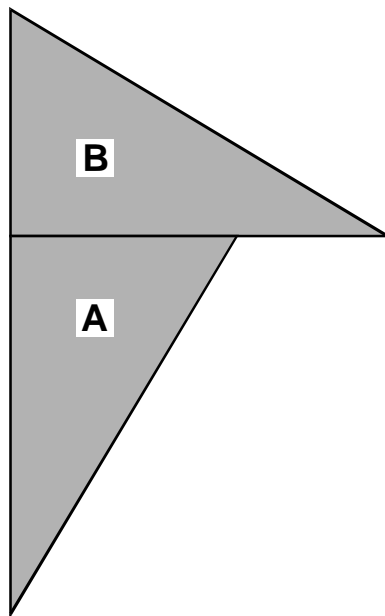
13. Calculate 15% of £340

_____ (2)

14. Calculate $\frac{5}{8}$ of \$ 160

_____ (2)

15. a) You can **rotate** triangle **A** onto triangle **B**.
Put a cross on the **centre of rotation**.



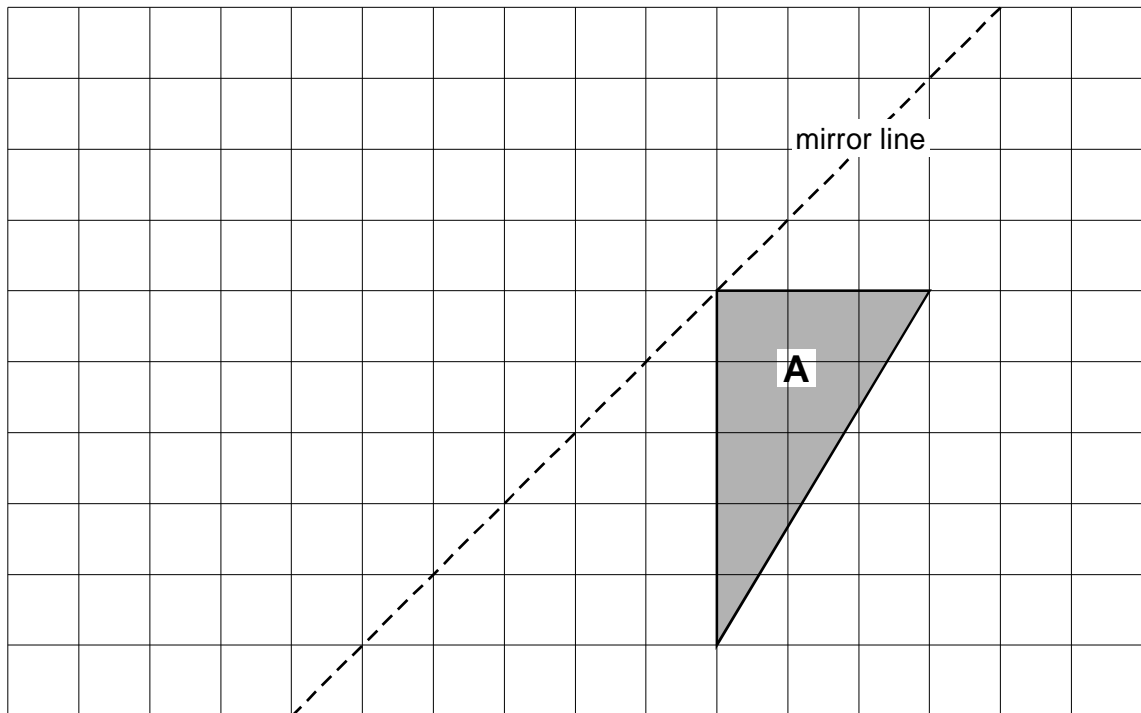
You may use tracing paper to help you. (1)

- b) You can **rotate** triangle **A** onto triangle **B**.
The rotation is **anti-clockwise**.
What is the **angle** of rotation?

Angle° (1)

(c) **Reflect** triangle **A** in the mirror line.

You may use tracing paper to help you.



(1)

17. A bag of sweets contains 420 sweets. If these are to be shared equally between 17 people how many sweets would each person get?

(2)

18. Put these numbers in order of size from smallest to largest:

0.2 , 0.122 , 0.02, 0.0546, 0.102, 0.065

(2)