



**ALL IN ONE PLACE BASE CAMP
CITY OF LONDON SCHOOLS FOR BOYS
MATHEMATICS SPECIMEN 11+ PAPER 1**



INSTRUCTIONS

- Write your name and candidate number in the box
- Calculators are not allowed
- Time: One hour
- Required: blue or black pen, pencil, ruler, eraser
- Write your final answer for each question in the space provided
- Show your working out clearly in the spaces provided
- Do not use other writing paper

Name: _____	Candidate number: _____
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Score		
Total		
Marker		

%



1. For this question, do your rough working on the right of the page if required. Write answers only in the spaces provided.

$$0.77 \times 1000 =$$

Answer: _____

The square root of 144 is

Answer: _____

$$4^4 =$$

Answer: _____

The cube root of **125** is

Answer: _____

$$19^2 =$$

Answer: _____

68/170 in its simplest form is

Answer: _____

$$5/8 \text{ of } 640 =$$

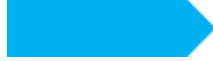
Answer: _____

$$40\% \text{ of } 70 =$$

Answer: _____

$$10\% \text{ of } 10\% \text{ of } 20\% \text{ of } 1000 =$$

Answer: _____



2. The calculator display shows $1/7$ as a decimal.

0.1428571

Complete the empty box to show how the calculator would display $1/70$. You do not need to write the digits in the same style, but must use the same number of digits as shown above.

3. These eleven identical numbered discs are put into a bag.

1, 2, 3, 5, 7, 8, 10, 12, 14, 15, 21

Giving your answers as fractions, find the probability of selecting:

a. an even number

Answer: _____

b. a multiple of 7

Answer: _____

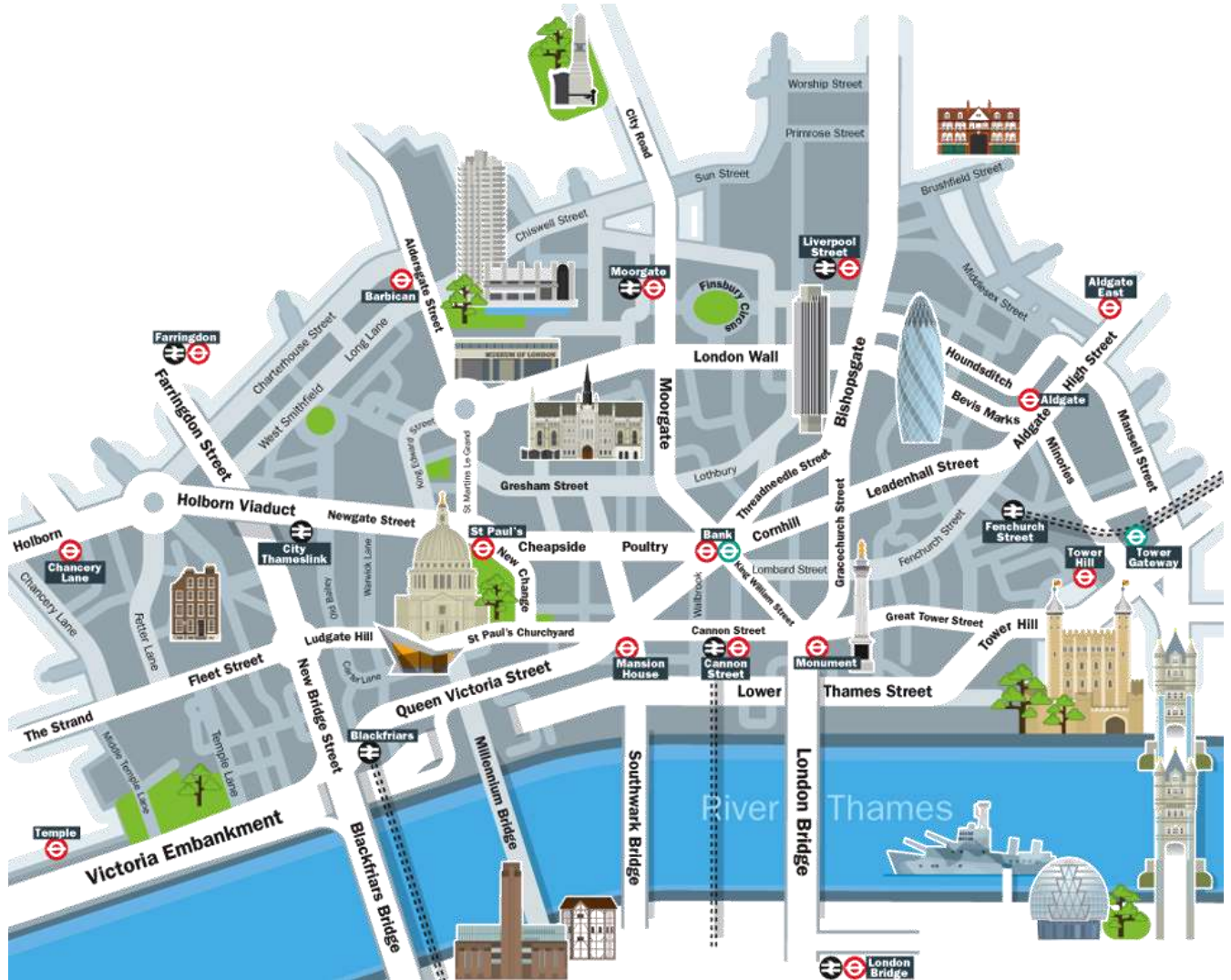
4. Work out $1691 \div 19$

Answer: _____

5. Write forty thousand and twelve in figures.

Answer: _____

6. Below is an area map of part of Central London. The map has a scale of 1: 12500



Use a ruler to measure the shortest walking route between Mansion House and St Paul's Tube Stations.

a. What is the length of the route on the map in millimetres? Include units in your answer.

Answer: _____



b. What is the length of the route on the map in centimetres? Include units in your answer.

Answer: _____

c. What is the length of the route on the map in metres? Include units in your answer.

Answer: _____

d. What is the real life walking distance to the nearest 20 metres? Include units in your answer.

Answer: _____

7. Fill in each box with one of these symbols: + - x ÷ to make each calculation correct.

$$8 \quad \square \quad 6 \quad \square \quad 4 \quad = \quad 44$$

$$9 \quad \square \quad 4 \quad = \quad 6 \quad \square \quad 6$$

$$(22 \quad \square \quad 18) \quad \square \quad = \quad 5$$

8. A rectangular field is 82 m long. The width of the field is 8 m less than the length. Find the perimeter of the field, including the units in your answer.

Answer: _____

9. Find the 3 digit missing number from this calculation.
Each • represents a digit.

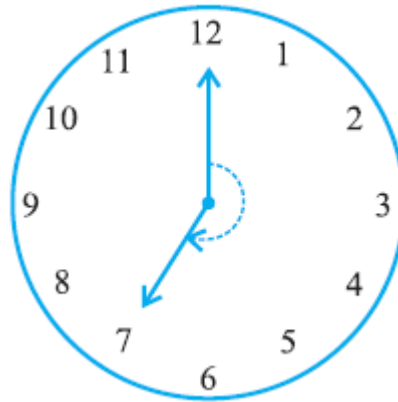
$$\bullet \bullet \bullet \div 56 = 49$$

Answer: _____



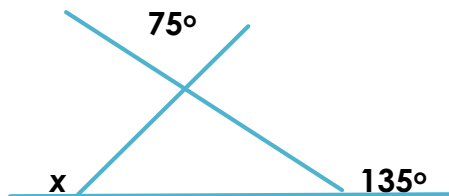
18. Is the angle shown in the clock at 19:00 reflex, obtuse or acute?

Answer: _____



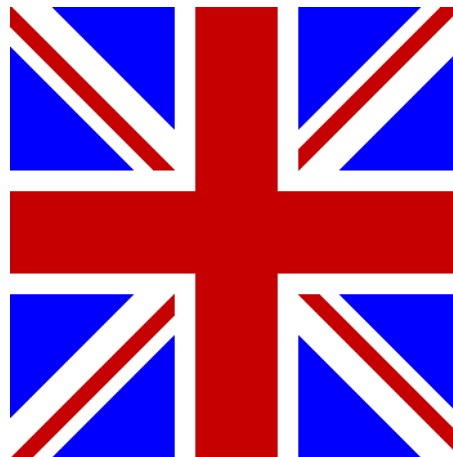
21. Calculate angle x in the diagram. The diagram is not to scale.

Answer: _____



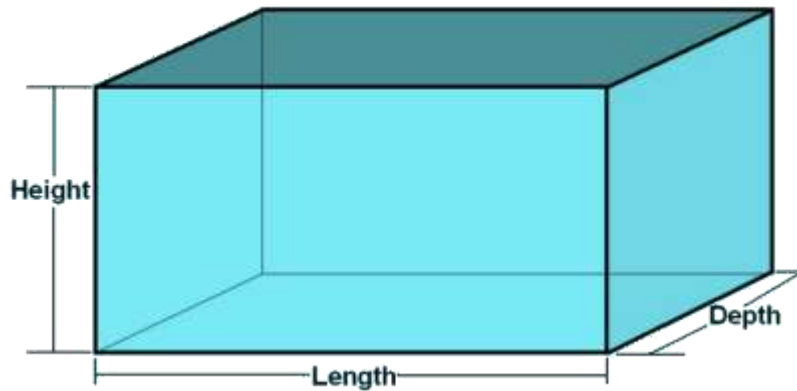
22. What is the order of rotational symmetry of this shape?

Answer: _____





24. The following questions are about cuboids. Each part of the question refers to a different cuboid. A cuboid, not drawn to scale, is shown below.



a. A cuboid has a base measuring 4 cm by 8 cm. The volume of the cuboid is 128 cm^3 . Find its height.

Answer: _____

d. Four faces of a cuboid have equal perimeters of 24 cm each. The other two faces have an area of 24 cm^2 .

Find the dimensions of the perimeter. Include units in your answers.

Length = _____

Depth = _____

Height = _____