

City of London School for Girls

YEAR 7 ENTRANCE EXAMINATION

MATHEMATICS

SAMPLE Paper 1

Time Allowed: 35 minutes

First Name:

Surname:

Instructions:

- Do write in pencil
- Do try as many questions as you can
- If you cannot answer a question, go on to the next one
- Do write your working out in the space near each question
- Do not erase your working out as you may get marks for it Calculators and rulers are NOT allowed

Paper 1: 35 minutes

1) $3078 + 256$

Answer:

2) $3078 - 256$

Answer:

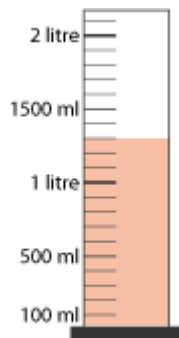
3) 158×23

Answer:

4) $3072 \div 12$

Answer:

5) What is the reading on the measuring cylinder



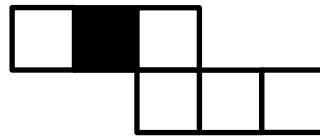
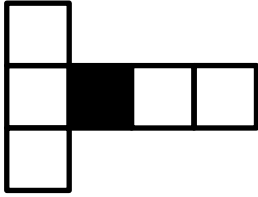
Answer: ml

6) What number is twelve less than eight thousand two hundred and seven?

Answer:

7) Both of these nets fold to make a cube.

Shade the square that will be opposite the black square when the net is folded into a cube.



8) Work out the value of:

a. $3 \times 7 + 4$

Answer:

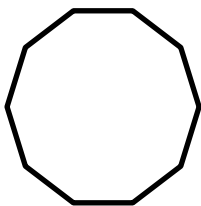
b. $12 \div 6 \div 2$

Answer:

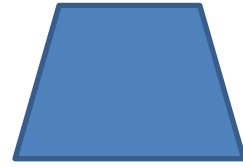
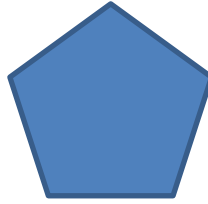
c. $15 - 4 \times 2$

Answer:

9) Shade in $\frac{3}{5}$ of this shape



10) Write down the mathematical name for each of these 2D shapes:



Answers:

11) Here is a table showing how many minutes four children took to get to school last week

	Maxine	Ava	Ellie	Sara
Monday	23	14	12	19
Tuesday	24	17	15	25
Wednesday	31	11	18	41
Thursday	26	16	12	22
Friday	19	16	16	23

a. Who took over 40 minutes to get to school?

Answer:

b. Which person has the shortest journey to school on any day?

Answer:

c. On Thursday, what is the range of the times?

Answer:

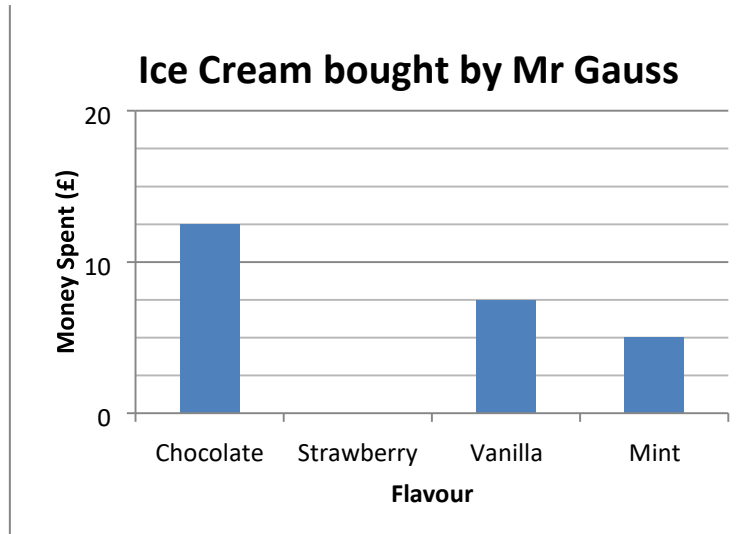
12) Round 12.05 to:

a. The nearest whole number

Answer: b. To 1 decimal place

Answer:

13) Here is a bar chart.



The bar for strawberry is missing! Mr Gauss spent £15 on Strawberry ice cream.

- Draw a bar to show how much Mr Gauss spent on Strawberry ice cream.
- How much did Mr Gauss spend on Vanilla Ice Cream?

Answer:

14) Fill in the next two values in this sequence:

$$1\frac{3}{4}, \quad 2\frac{1}{2}, \quad 3\frac{1}{4}, \quad \underline{\hspace{1cm}}, \quad \underline{\hspace{1cm}}, \quad \dots$$

15) Draw a net of a triangular prism

16) How many edges does a cube have?

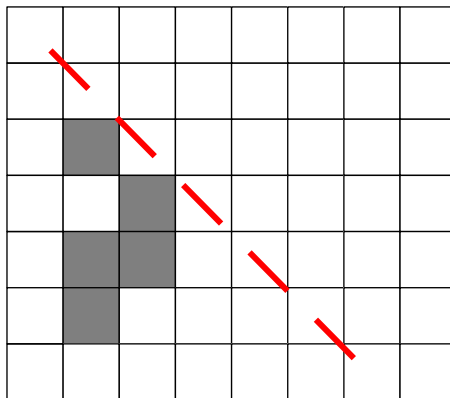
Answer:

17) Which of the following is the best estimate for the length of a bus?

- 0.2km 2m 20cm 20 000mm

Answer:

18) Reflect the grey shape in the dashed mirror line.

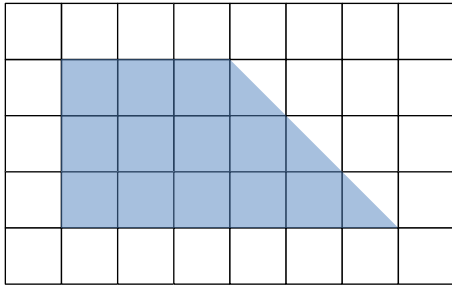


19) The temperature in Inverness is 12 degrees lower than the temperature in London. The temperature in London is 5 degrees.

What is the temperature in Inverness?

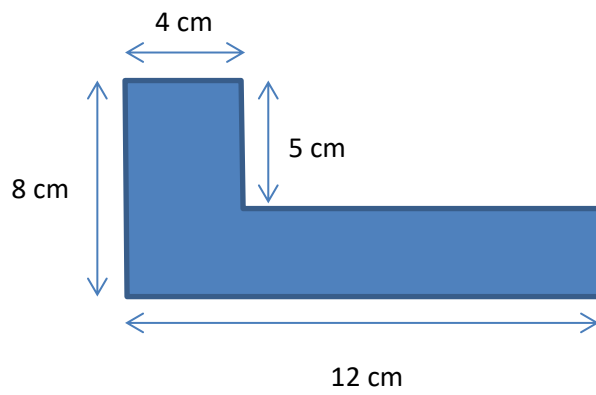
Answer:

20) Find the areas of the following shapes:



1 square = 1 cm²

Answer:cm²



Not drawn to scale

Answer:cm²

21) Max has more than 4 apples but fewer than 7 apples. Alex has more than 5 apples and fewer than eight apples.

How many apples do Max and Alex have *altogether*? Circle all the possible values

4 5 6 7 8 9 10 11 12 13 14 15

Answer:

22) Suki saves £12 in January, £18 in February and £5 in March. What is her mean (average) monthly saving?

Answer:

23) What is $\frac{1}{2}$ of $\frac{4}{5}$ of 35?

Answer:

24) Put the following numbers in order from smallest to largest:

$\frac{3}{5}$ 0.58 $\frac{5}{8}$ 62% 0.508

Answer:

25) You are told that $82 \times 107 = 8774$

Use this to work out the value of the following:

a. 8200×107

Answer:

b. $8774 \div 107$

Answer:

c. $8774 \div 41$

Answer: d.

A bus can seat 82 people.

8770 people travel to a football match by bus. How many buses are needed?

Answer: