Haileybury

Candidate Name	
Current School	

Mathematics - Sample Assessment

Removes Early Test Examinations

Time allowed: 50 minutes

Please read this information before the examination starts

- ANSWER ALL QUESTIONS

- Please write your solutions on the question paper and, where relevant, in the designated space.

- CALCULATORS ARE NOT PERMITTED

- SECTION A –   One mark questions which you should be able to calculate in your head
- SECTION B –   Harder questions for which working must be shown to gain full marks. Answers without supporting work/calculations will score zero

All questions are worth 1 mark

Write your answers down the right-hand side

		Answers
1	What is 7 x 8?	
2	Write in figures, the number *four hundred thousand, nine hundred and two*	
3	How many metres (m) is 7000000 mm?	
4	How many faces does a triangular prism have?	
5	What is 132 ÷ 11?	
6	If Michael saves £2.40 a day, what is the least number of weeks needed to save £150	
7	A hockey match starts at 11.35 am. It has 2 halves lasting 35 minutes and there is a break of 10 minutes between each half. At what time does it end?	
8	11 + 8 − 4 + 2 =	
9	Which of the following numbers is the closet to one? 0.0099, 0.81, 1.2, 0.087, 1.21	
10	7842 − 998 =	

		Answers
11	What is the area of a triangle with base 7cm and height 4.5cm?	
12	18 – 4 x 2 + 3 =	
13	What fraction of the strip is not shaded?	
14	2570 ÷ 10000 =	
15	Write 0.4 as a fraction in its simplest terms	
16	What temperature is 17°C less than 8°C?	
17	How many edges does a cuboid have?	
18	Add together $\frac{1}{5}$ and $\frac{7}{10}$	
19	5cm on a map represents 1km on the ground. What is the distance on the ground of two villages which are 12cm apart on the map?	
20	98 ÷ 7 =	

Go straight onto section B

Section B

Make sure you show working as full marks may not be given for an unsupported correct answer.

Where relevant, please write you answers (Ans) in the space provided.

Marks for each question are shown in brackets, i.e. (2) means 2 marks.

1. What is 4619 + 457 + 88?

Ans………………………
(2)

……

2. Find the difference between '*one thousand, two hundred and thirty four*' <u>and</u> '*six hundred and seventy eight*'?
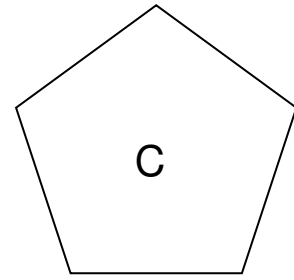
Ans………………………
(2)

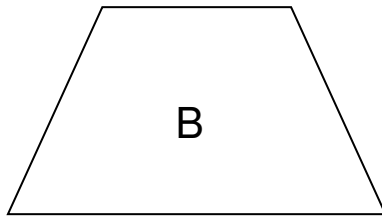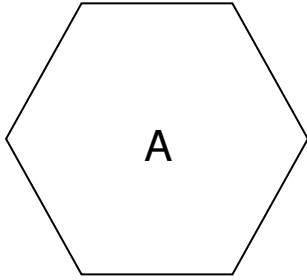……

3. 94 × 38 =

Ans………………………
(3)

4. Look at the shapes below:

a) Draw all the lines of symmetry on A.

b) If B is a trapezium mark the parallel lines with an arrow.

c) What is shape C called?

(3)

....

5. Find the perimeter and area of the following shapes.(show working)

a)

8 cm

7 cm
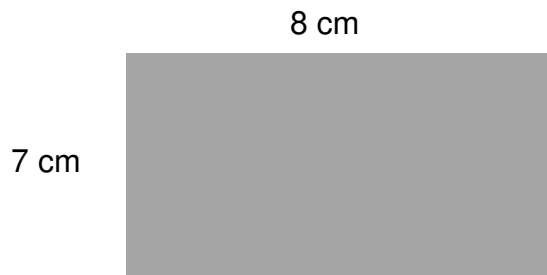
Perimeter_____cm

Area_____cm^2

b)

8 cm

10 cm

9 cm
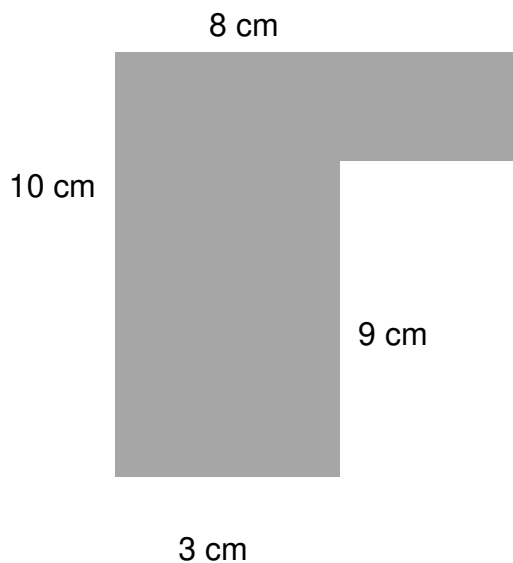
Perimeter_____cm

Area_____cm^2

(5)

3 cm

6. In his wardrobe Mr Maths has 2 Shirts (which he has labelled S1, S2) and 4 Ties (T1, T2, T3, T4).

   a) How many different pairings of Shirts and Ties are possible? A list has been started for you:

   S1 T1
   S1 T2
   S1 T3
   S1 T4
   S2 T1

   (2)

   He also has 2 belts

   b) How many different combinations of shirts, ties and belts are there?

   (2)

   He also has 3 pairs of shoes

   c) How many different combinations of shirts, ties, belts and shoes are there?

   (1)
   ....

7. I think of a number, add 4, multiply by 7 and subtract 21. The result is 35. What number did I start with?

   Ans…………………….
   (2)

8. 6444 ÷ 18 =

Ans…………………………
(3)

……

9. Jenny's scores on her spelling tests are 8, 14, 11, 9, 12 and 9. What is her average?

Ans……………………….
(3)

……

10. Work out 0.012 + 2.03 + 0.1456

Ans……………………….
(2)

11. Find x if $5x - 4 = 26$

Ans............................
(2)

....

12. Calculate $7\frac{5}{8} - 3\frac{5}{6}$ giving your answer as a mixed number.

Ans............................
(3)

....

13. Find x if $3x + 5 = 20$

Ans............................
(2)

....

14. A man cycles uphill for 3km at 6km/h
He then cycles along 8km of flat at 8km/h
Finally he heads downhill for 16km at 12km/h
Find the time taken for the whole journey
Give your answer in hours and minutes

Hint:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

Hours............ Minutes..............
(3)

The exam finishes with 5 questions which require thinking but no extra curriculum to be covered.