



IPSWICH SCHOOL

Entrance Tests
Year 7 Entry
Practice Papers



IPSWICH SCHOOL

ENTRANCE EXAMINATION PRACTICE PAPER

MATHEMATICS

Time allowed: 45 minutes

Calculators are not permitted. Write your answers in the spaces provided. Do not use correction fluid. Show some working where possible, using the spaces provided. You have 45 minutes and you will be told when there are 10 minutes left.

1. Write the following numbers in figures (for example, twenty-three is 23 in figures)

- (a) Two hundred and nine
- (b) Nine thousand and ninety
- (c) Sixty-five thousand and sixty-five

2. Calculate the following:

- (a) $9 \times 6 =$
- (b) $63 \div 9 =$
- (c) $14 \times 10 =$
- (d) $270 \div 100 =$
- (e) $0.4 \times 1000 =$
- (f) $5 \times 72 =$
- (g) $325 \div 25 =$
- (h) $24 \times 25 =$
- (i) $6060 \div 5 =$
- (j) $999 \div 5 =$
- (k) $(10 - 7) \times 8 =$
- (l) $6 \times 15 + 5 =$
- (m) $8 + 3 \times 4 =$
- (n) $9 - 2 \times 4 =$

3. Use a method of your own choice to do the following calculations:

- (a) 417×31
- (b) $873 \div 9$

4. Calculate the following fractions:

- (a) two-thirds of thirty-six is
- (b) $\frac{3}{4}$ of 36 is
- (c) $\frac{5}{8} \times 32 =$

5. Calculate the following as percentages – the first one is done for you.

- (a) 7 out of 10 is**70%**.....
- (b) 6 out of 30 is
- (c) 7 out of 100 is
- (d) 3 out of 1500 is

6. Continue the number patterns for three more places, as shown in the example.

Example: 1, 2, 3, 4,**5**.....**6**.....**7**.....

- (a) 35, 28, 21,,,
- (b) 2, 5, 10,,,
- (c) 10, 0.1, 0.001,,,

7. Calculate the following:

- (a) $7.53 + 8.04 =$
- (b) $9.71 + 32.8 =$
- (c) $29.73 - 12.69 =$
- (d) $27.2 - 9.33 =$

8.

Do this question on the axes provided. Draw the following points:

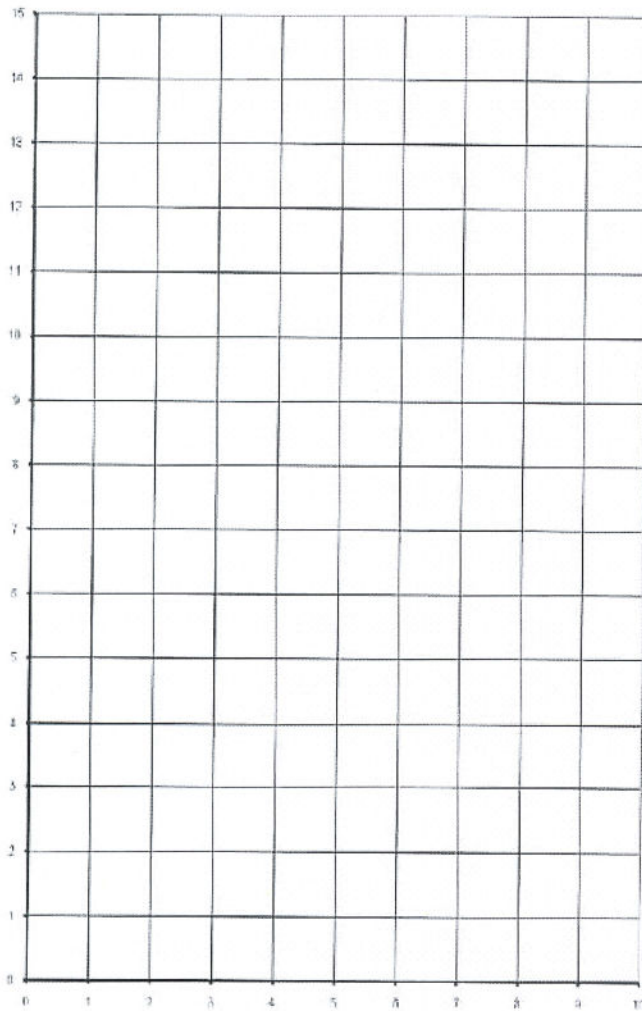
A(1,2), B(1,7), C(4,7), D(4,12), E(7,12), F(7,7), G(9,7), H(9,2) and join the points in that order.

(a) What is the perimeter of ABCDEFGH?

.....

(b) What is the area of ABCDEFGH?

.....



9. A class of 10 pupils takes two tests, in Maths and English. Here are the marks out of 100:

Maths: 46, 47, 48, 50, 50, 50, 50, 59, 60, 61

English: 40, 70, 55, 79, 70, 29, 70, 77, 79, 70

- (a) What is the mode (i) in Maths.....
(ii) in English.....
- (b) What is the range (i) in Maths.....
(ii) in English.....

Do you think that the class is better at Maths or English? Give reasons for your answer.

.....
.....
.....

10.

- (a) Write down all the factors of 24
- (b) Circle the prime numbers in this list: 11 27 1 5 51 2 17
- (c) Put the following numbers in order of size, beginning with the smallest

95%, 0.875, 0.9, $\frac{3}{4}$, 0.809

.....

11. Round the following quantities to the nearest **centimetre**:

(a) 2.797 m \approx

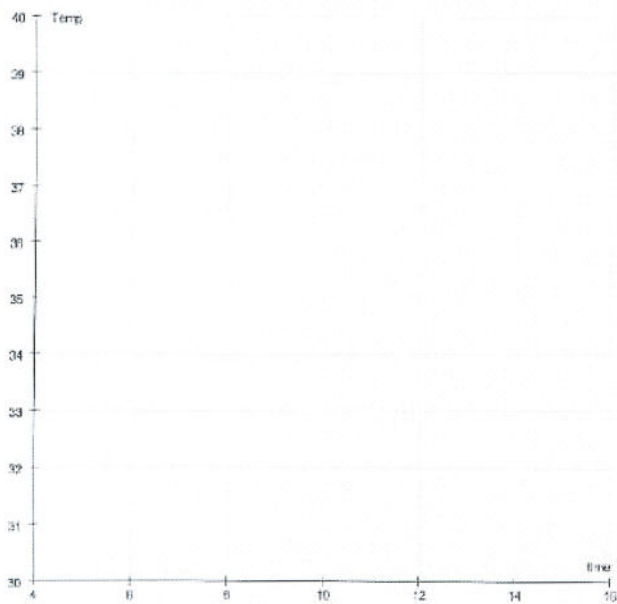
(b) 917.5 cm \approx

(c) 835 mm \approx

12. The table shows the temperature of a hospital patient over the course of a day.

Time	6 a.m.	8 a.m.	10 a.m.	12 p.m.	2 p.m.	4 p.m.
Temp ($^{\circ}\text{C}$)	35	34.5	37	37.5	39	39.5

On the squared grid below, draw a line graph to display these data. Below your line graph make one comment about the condition of the patient.



My comment:

.....

13. Reflect the word 'Lysander' in the mirror line

LYSANDER



14. Consider the following three statements:

$$1 = 1$$

$$1 + 3 = 4$$

$$1 + 3 + 5 = 9$$

Showing your working clearly, can you find a quick way of adding up the first ten thousand odd numbers?