



# SOUTH SYDNEY HIGH SCHOOL

2001  
School Certificate  
Trial Examination

## Mathematics

### Section 1 Question Booklet

#### Directions for Section 1

- You are allowed 30 minutes to answer this section
- Section 1: Questions 1 – 25 (25 marks)
- Attempt ALL questions
- Calculators are NOT to be used in this section
- The Formulae on page 4 of the Instruction Booklet may be used in section 1
- Write your answers in the space provided
- Write your student number and/or name at the top of every page

This paper **MUST NOT** be removed from the examination room

STUDENT NUMBER/NAME.....

Complete your answers to Questions 1 – 25 in this booklet.

1. Write the numeral for 'six hundred and sixty thousand'.

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2. Evaluate  $34.7 \times 1\,000$

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3. What is the missing number in the pattern ?

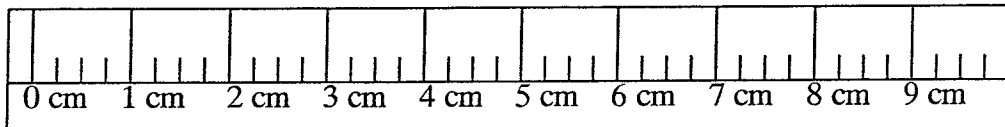
1, 1, 2, 3, , 8, 13

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4. Find a quarter of 1 200.

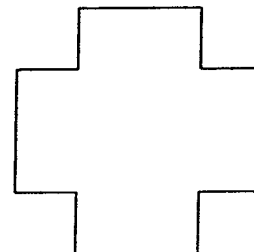
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5. Mark, on the ruler, a reading of 7.25 cm.

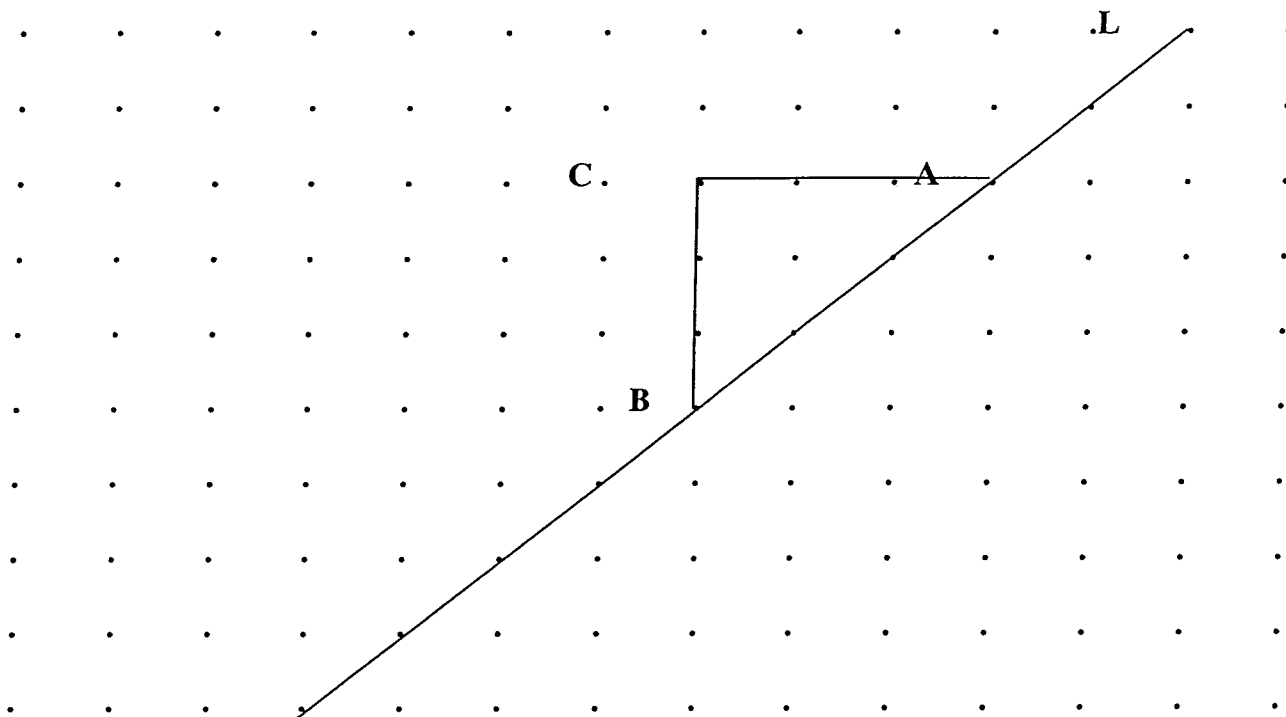


6. How many axes of symmetry has the following logo ?

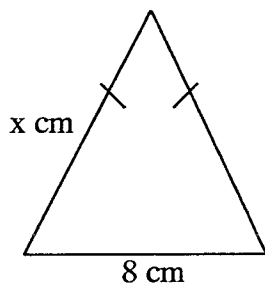
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7. Draw a reflection of the right-angled triangle ABC in the line L.



8. A piece of wire 42 cm in length is bent to form an isosceles triangle.



What is the value of x in the diagram ?

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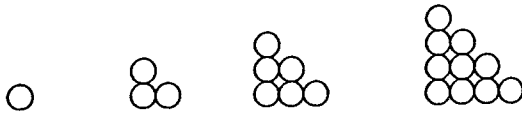
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9. Evaluate  $12 \times 38 + 28 \times 38$

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10. Gina makes a series of towers with toy cylinder blocks as shown.



How many toy cylinder blocks are needed to build an eight storey tower ?

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11. In a mathematics class there are 4 more girls than boys.  
 If there are 16 girls, what is the probability of selecting a boy from this class at random ?

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12. For people up to 18 years of age, the recommended number of hours of sleep (H) is given by :

$$H = 8 + \frac{18 - A}{2} \quad \text{where } A \text{ is the age in years.}$$

Using this formula, how many hours sleep is recommended for a 4 year old ?

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13. When the two middle digits of the number 9 627 are swapped, what is the difference in value between the original number and the new number ?

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14. What is the median of the set of scores shown in the frequency table.

Score	Frequency
1	8
2	7
3	6
4	4
5	5

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15. A video finishes at 11:35 pm.  
If the video ran for 165 minutes, what time did the video start ?

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16. Dimitry saves \$36 into a savings account from his weekly wage.  
If this is 5 % of his weekly wage, find Dimitry's weekly wage.

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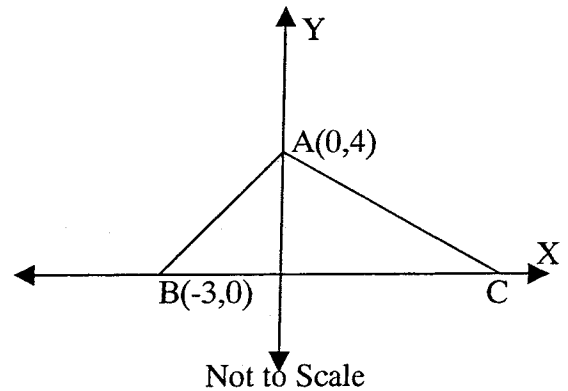
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17. The triangle ABC has an area of 18 square units.

Find the coordinates of C.

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18. Water drips from a leaking tap at a rate of 50 mL every 2 minutes.  
How many litres of water drips from the tap in an hour ?

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19. Find the value of  $\Delta$  for the following calculation.

$$1\frac{1}{2} \times 3\frac{2}{3} = \frac{\Delta}{4}$$

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20. Philip is constructing a triangle DEF.  
The side DF is twice the length of DE.

Complete the triangle to accurately show the position of D.



21. Write a set of three different scores with a mean of 28 and a range of 9.

22. Sonia writes the following sentences about a shape.

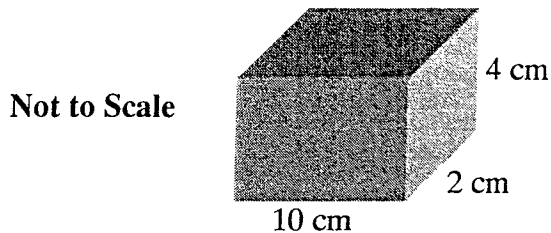
"It has four sides the same length and the diagonals bisect each other at right angles. There are no right angles."

What geometrical shape are the sentences describing ?

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23. A child's playing block as shown is to be painted on all surfaces.

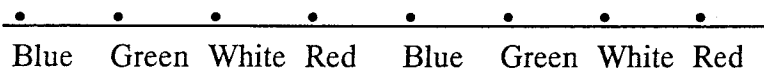


Calculate the total surface area to be painted.

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24. A chain is made from coloured beads as shown.



Mary made the chain until she ran out of beads.  
The last colour she used was green and she used more than 70 beads in total.  
What is the smallest number of beads Mary used to make this chain ?

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25. In three jars there are 130 lollies altogether.  
The number of lollies in jars A and B in total is 62.  
The number of lollies in jars B and C in total is 85.  
How many lollies are there in jar B ?

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**End of Section 1**