



# HAMPTON COURT HOUSE

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Surname:.....

First name:.....

**Entrance Examination  
Year 6  
(to be taken in Y5)**

## MATHEMATICS

Please read this information before the examination starts.

- This examination is 45 minutes long.
- There are 54 marks in this test.
- Calculators are not allowed.
- Show all your workings clearly. Credit may be awarded for a logical method even if the final answer is incorrect.
- Answer as many questions as you can in the time available. Do not worry if you cannot complete all the questions, as curricula vary from school to school.

1. Write down the answers to these questions.  
You may show your working or work them out in your head.

a.  $12 \times 8$

Answer: ..... [1]

b.  $1.567 \times 10$

Answer: ..... [1]

c.  $23405 \div 1000$

Answer: ..... [1]

d.  $0.87 \times 100$

Answer: ..... [1]

2. Calculate

a.  $356 + 63$

Answer: ..... [1]

b.  $867 - 251$

Answer: ..... [1]

c.  $875.25 + 2.6$

Answer: ..... [1]

d.  $691.6 - 84.3$

Answer: ..... [1]

3. Work out  
a.  $256 \times 3$

Answer: ..... [1]

- b.  $312 \times 12$

Answer: ..... [1]

4. Work out  
a.  $240 \div 4$

Answer: ..... [1]

- b.  $561351 \div 3$

Answer: ..... [2]

5. Calculate  
a.  $2 \times 3 - 4$

Answer: ..... [2]

- b.  $12 + 8 \div 4$

Answer: ..... [2]

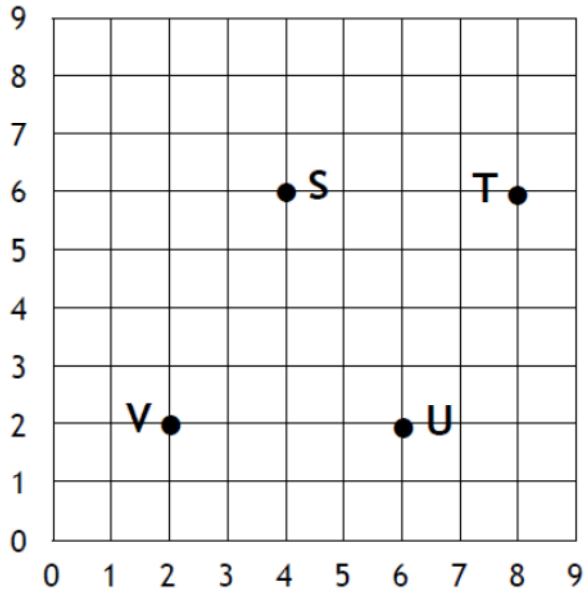
- c.  $2^2 \times 3 - 4$

Answer: ..... [2]

- d.  $14 - 6 \times 2$

Answer: ..... [2]

6. Plot the following points on a grid.



a. What are the co-ordinates of the points at letter U and letter S?

U (.....) [1]

S (.....) [1]

b. If you joined the points in alphabetical order, then back to S, what shape would you have drawn?

Answer: ..... [2]

7. Complete the following sequences:

a. 16 13 10 7 ..... [2]

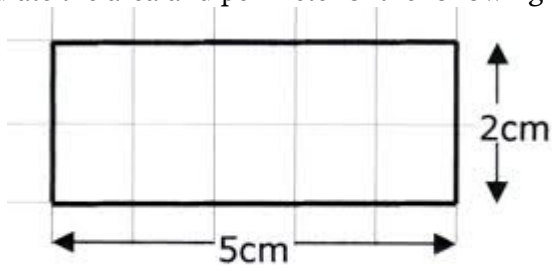
b. 1 4 9 16 ..... [2]

8. Complete the following table. [6]

Fraction	%	Decimal
$\frac{1}{2}$		
	25%	
$\frac{1}{8}$		
	10%	
		0.2
$\frac{1}{3}$		

9. Calculate the area and perimeter of the following shapes and give the correct units.

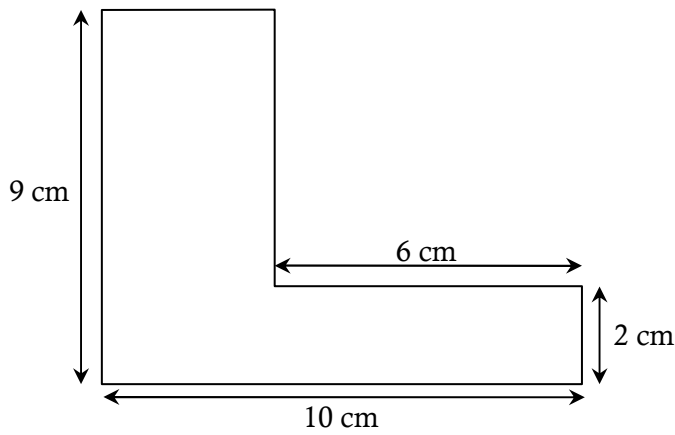
a.



Area: ..... [1]

Perimeter: ..... [1]

b.



Area: ..... [1]

Perimeter: ..... [1]

Units [2]

10. Calculate the following

a.  $\frac{2}{5}$  of 25

Answer: ..... [1]

b. 25% of 80

Answer: ..... [1]

11. Calculate the following

a.  $0.4 \times 0.4$

Answer: ..... [1]

b.  $15 \div 0.5$

Answer: ..... [1]

12. Anja and Jon buy some cupcakes. Altogether they bought 28 cupcakes. Anja has 4 more cupcakes than Jon. How many cupcakes do Anja and Jon each have?

Answer: ..... [2]

13. Daniela is travelling from London to Birmingham.

a. The distance from London to Birmingham is 189.5 km. Convert the distance she is travelling to meters.

Answer: ..... [1]

b. The journey takes 2.25 hours, if Daniela leaves London at 10.18 am, what time will she arrive in Birmingham?

Answer: ..... [1]

14. A box contains 2 blue pencils, 3 green pencils and 4 red pencils. If I pick a pencil from the box at random (with my eyes shut), what is the probability that

a. I will pick out a green one?

Answer: ..... [1]

b. I will pick a pencil that isn't red?

Answer: ..... [1]

15. The supermarket had a sale on their bottles of lemonade. Instead of selling them for 80p per bottle, they sold them for 55p per bottle.  
They sold 200 bottles of lemonade in a week.  
How much less did they take by selling at the lower price?

Answer: ..... [3]

END OF EXAMINATION