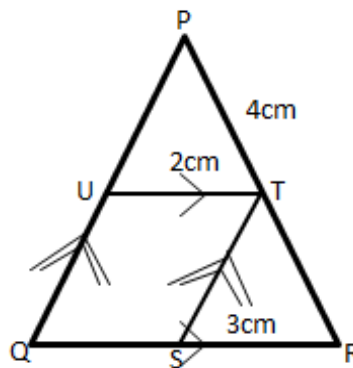


**TRINITY HOME COLLEGE**  
**SABO OJOO, IBADAN**  
**COWBELL COMPETITION SELECTION EXAMINATION**  
**JUNIOR CATEGORY**

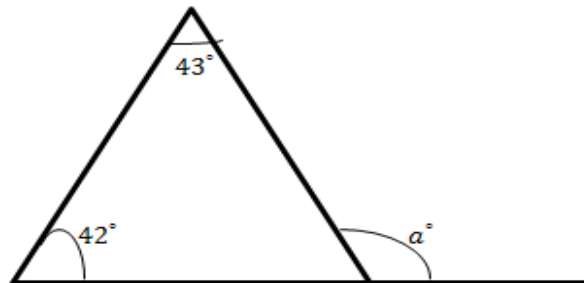
**TIME: 1 HOUR**

**100 MARKS**

1. Factorize  $6pq^6 - 12pq^4$   
 (b) The mean age of five students whose ages are 8,  $x$ , 13, 12, 10, is 10. Find the value of  $x$  in years.
2. Find the amount of N600.00 in 4 years at 5% per annum  
 (b) 12.5% of a number is 50, find the number.
3. In the diagram below, find  $\angle TR$



4. Find the value of  $a$  in the diagram below



- (b) Find the interest on N30,000, 2 years at 40% per annum compound interest.
5. What is the probability of selecting consonant from the word VICE PRINCIPAL?
6. Represent  $x \geq -3$  on the number line.  
 (b) Represent  $x < 8$  on the number line  
 (c) The angles of a Hexagon are  $x^\circ$ ,  $(x + 20)^\circ$ ,  $(x - 15)^\circ$ ,  $2x^\circ$ ,  $(\frac{3x}{2} + 20)^\circ$ , find  $x$   
 (d) The exterior angles of a quadrilateral  $y^\circ$ ,  $(2y + 5)^\circ$ ,  $(y + 15)^\circ$ , and  $(3y - 10)^\circ$ , find  $y$ .
7. Three angles of a Nonagon are equal, and the sum of the other six angles is  $960^\circ$ . Calculate the size of the equal angles.  
 (b) Solve  $\frac{1}{x-3} - \frac{2}{x-4} = 0$   
 (c) If equations  $3x - 2y = 12$  and  $2x + y = 1$  are solved simultaneously, find the value of  $3y + 2$ .  
 (d) When 4 is divided by  $(x - 7)$ , the result is the same as when 3 is divided by  $(x + 4)$ , find  $x$ .