

SENIOR TWO END OF JUNE TEST 2022
MATHEMATICS
1 HOUR 30 MINUTES
20th June 7:15pm-8:45pm

INSTRUCTIONS

- Attempt all questions in this paper.
 - Poor and untidy work will lead to loss of marks.
 - Start with the easiest question to you.
1. The Chaplain sent the religious prefect to count number of Priests present on a particular confession day at the Martyrs Lake and the religious prefect counted in six's and had 35 six's. on reporting to the chaplain, she was tasked to count them in eights. How many eight's did she obtain?
 2. Stephanie and Claire are senior two students. Stephanie participates in evening jogging after every 8 days and Claire after every 6 days. If both of them jogged on Tuesday, when will both of them jog together again?
 3. Without using tables or calculators evaluate: $\frac{\left(\frac{1}{27}\right)^{-\frac{2}{3}} + (81)^{\frac{3}{4}}}{9}$
 4. Using a ruler, pencil and a pair of compasses only, construct a triangle ABC such that AB= 6cm, angle ABC=60° and angle BAC= 60°.
 5. The interior angles of a regular polygon add up to 2340. Find the size of the interior angle.
 6. Without using tables or calculators, solve for the value of x given that:
 $\log_{10} x - 2\log_{10} 4 = \log_{10} 20 - \log_{10} 4$.
 7. On a particular Thursday after a series of double dealing, a form two student had a collection of 15 pieces of chicken. If he kept $\frac{1}{5}$ of the pieces of chicken in the suitcase, $\frac{1}{3}$ of the remainder in the bucket and shared the rest with his friends. How many pieces of chicken did he?
 - a) Keep in the bucket.
 - b) Share with his friends.
 8. On a particular Saturday, a tarmac dance started at 7:30pm. Given that the D.J played a fresh song after every 5 minutes and no song was played more than once,
 - a) Generate a formula showing the relationship between songs played and time taken.
 - b) Given that the last song stopped playing at exactly 11:30pm, using the formula in (a) above, how many songs did the D.J play in total?
 9. A 75-year-old pilgrim set off on foot from Kayunga Parish, Lugazi for 3rd June 2022 Martyrs Day scheduled at the Catholic shrine Namugongo. Given that he set off on 30th may 2022 at exactly 8:00am and reached Namugongo on 2nd June at exactly 4:00pm. Find the degrees the clock made from the time he started his journey to the time he reached his destination.

“Fear Not, Rise Up For Excellence”

10. On a particular Wednesday, the teacher asked a class captain to approximate the number of students who don't hand in their books for marking with a fraction, the class captain however wrote a fraction that is in such a way that if one is added to its numerator and denominator, the fraction becomes $\frac{1}{2}$ and if two is subtracted from its numerator and denominator, the fraction becomes $\frac{1}{3}$. What fraction did the class captain write?

“GOOD LUCK”