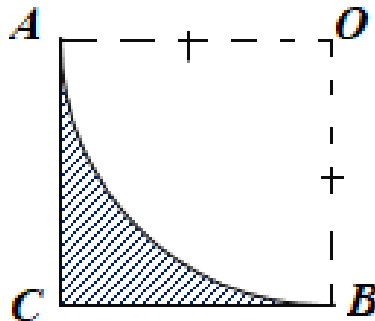


S.2 MTC EXERCISE 02

- You are advised to personally do this tutorial first, discuss your results with it anyone, if possible; and then check out the solutions that will follow tomorrow, with **Exercise 03**

- This exercise is marked out of **40**

1. Arrange the following fractions in ascending order. (04 marks)
 $\frac{2}{3}$, $\frac{3}{4}$, $\frac{1}{8}$, $\frac{2}{15}$, $\frac{7}{10}$
2. Express **2.12121212** as a fraction in its lowest terms. (04 marks)
3. Musa is facing in the direction ENE. In which new direction does he face when he turns through
 - (i) 270° Clockwise?
 - (ii) 45° anticlockwise? (04 marks)
4. A trader bought 5 Shirts at Shs. 12,000 each. He sold 3 shirts at Shs. 15,000 and 2 shirts at Shs. 14,000. Calculate the overall percentage profit from the sale of the shirts. (04 marks)
5. Given that **113**₁₀ is equal to **305**_n. Determine the unknown base, **n**. (04 marks)
6. Determine the Equation of a line through the point **(1, -5)** , parallel to the line $y = \frac{5}{2}x - 4$ (04 marks)
7. Simplify: $\frac{4\frac{2}{3} - (\frac{3}{4} \text{ of } 1\frac{4}{5})}{(\frac{1}{6} \text{ of } 5)}$. (04 marks)
8. Find the area of the shaded part given that **AO = 3.5 m** (04 marks)



9. Solve the inequality $\frac{3x}{5} + \frac{(5x-2)}{3} \geq 9$ (04 marks)

10. Given that at Stanhope Forex Bureau $1 \text{ Pound sterling} = 1.5 \text{ U.S dollars}$ and $1 \text{ Pound sterling} = 150 \text{ Kenya Shillings}$. Rhoda visits the Bureau with $\text{KShs. } 750,000$ Before leaving for United States. Calculate the amount of money in U.S dollars she is given before leaving. (04 marks)