PROJECT WORK OF O. Maths

(FOR MID-TERM)

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[DEPARTMENT OF MATHS]

1. List the formula of;

a) Distance formula

→ The formula of distance is;

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

b) Section formula for internal and external ~~dis~~division.

→ The formula of section formula for internal division is;

$$= \left[\frac{m_1 x_2 + m_2 x_1}{m_1 + m_2}, \frac{m_1 y_2 + m_2 y_1}{m_1 + m_2}\right]$$

→ The formula of section formula for external division is;

$$= \left[\frac{m_1 x_2 - m_2 x_1}{m_1 - m_2}, \frac{m_1 y_2 - m_2 y_1}{m_1 - m_2}\right]$$

c) Mid-point formula

→ Mid-point formula is;

$$= \left[\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right]$$

2.) Estabish the relation between the three different measurement of angles (degree, grade and radian).

-> Relation between the three different measurement of angles are;

Since, 1(L)right angle = 90° and 1 right angle = 100^g

$\therefore 90° = 100^g$

$\therefore 1° = \left[\frac{10}{9}\right]^g$

Also, $1^g = \left[\frac{9}{10}\right]°$

Again, π radian $(\pi^c) = 180° = 200^g$

$\therefore 1^c = \left[\frac{180}{\pi}\right]°$ and $1^c = \left[\frac{200}{\pi}\right]^g$

Also, $1° = \left[\frac{\pi}{180}\right]^c$ and $1^g = \left[\frac{\pi}{200}\right]^c$

$\therefore$ The formula to find relation between radian, grade and degree measures is;

$$180° = 200^g = \pi^c$$