NAME & ATTAH CHRISTIAN A

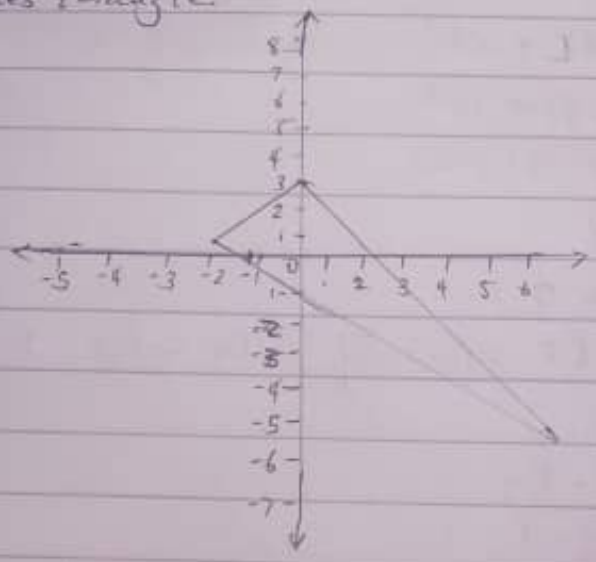
COURSE: MAT 102

DEPT. MECHATRONICS ENG.

MATRIC NO & 19/ENG05/108

ASSIGNMENT

Q) Show that the point A(6,-5), B(-2,1), C(0,3) form an isosceles triangle.



The distance between point AC = $\sqrt{(0-6)^2+(3-(-5))^2}$

$= \sqrt{36+64}$

$= 10$

Between Point AB = $\sqrt{(-2-6)^2+(1-(-5))^2}$

$= \sqrt{64+36}$

$= 10$

Between Point BC = $\sqrt{(0-(-2))^2+(3-1)^2}$

$= \sqrt{4+4}$

$= \sqrt{8}$

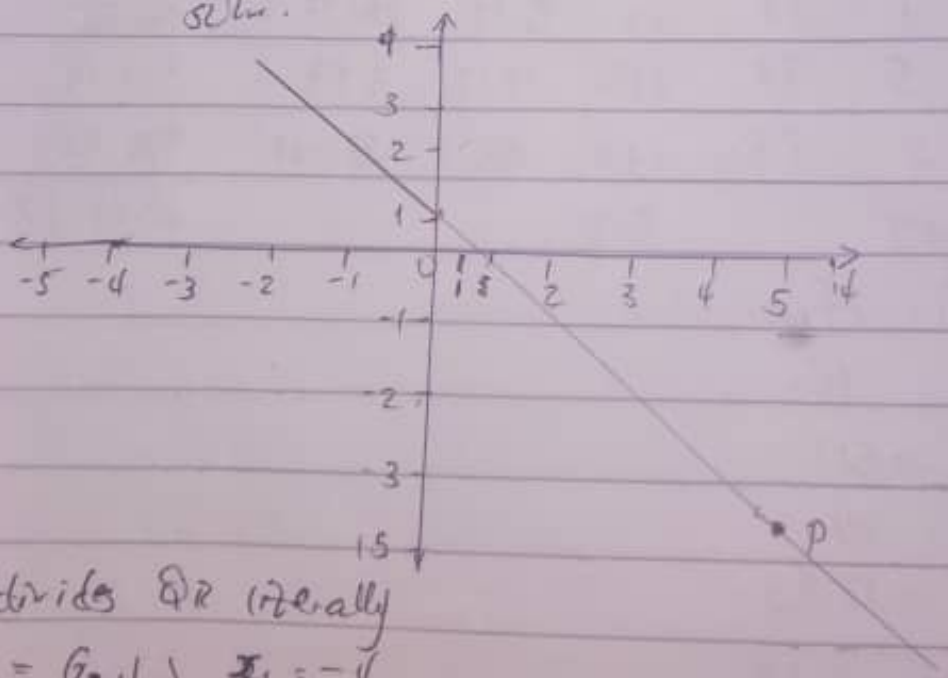
∴ The points A(6, -5), B(-2, 1), C(0, 3) form an isosceles triangle because both two are equal.

⑦ If P, Q and R are points (5, -3), (-4, 9) and C(14, -5) respectively, find the ratio in which

a) P divides QR

b) R divides PQ

Soln.



P divides QR internally

$Q = (x_1, y_1)$, $x_1 = -4$

$R = (x_2, y_2)$ $x_2 = 14$

$P = (x_3, y_3)$ $x = 5$