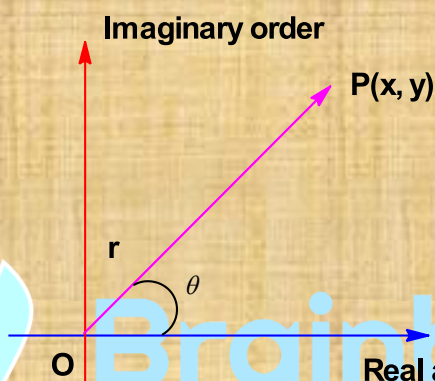


Chapter **5**

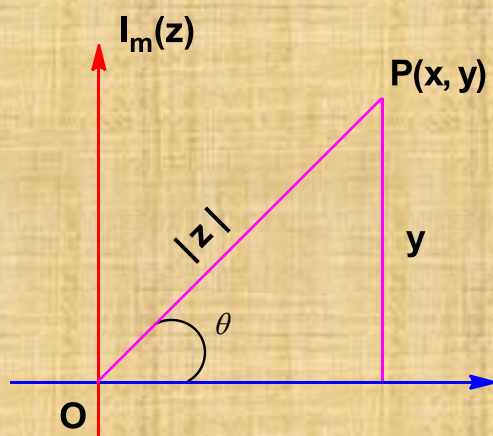
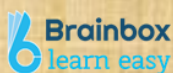
COMPLEX NUMBERS

Representation of a complex number in Cartesian form:

Every complex number $z = x + iy$ can be represented by a point on the Cartesian plane known as Complex plane(Argand plane) by the ordered pair (x, y) .



Amplitude (or) Argument of a complex number 'z' is the inclination of the directed line segment representing 'z', with real axis.



If $z = x + iy$ then,

$$\text{Amp}(z) = \tan^{-1}\left(\frac{y}{x}\right)$$