

Pg. 15

Romylos
ACHA4000

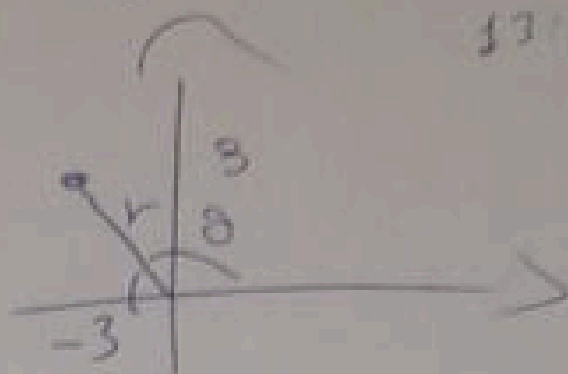
Frangos

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$$(ii) (-3 + 8j)^5$$



$$\tan \theta = -69.44$$

$$r^2 = 9 + 64$$

$$r = \sqrt{73}$$

$$(\sqrt{73})^5 \left(\cos(5)(-69.44) + j \sin(5)(-69.44) \right)$$

$$45530.996 \left(\cos(-347.2) + j \sin(-347.2) \right)$$

$$(d) j^5 \times j^3 = j \times (-j) = -j^2 = \underline{\underline{1}}$$