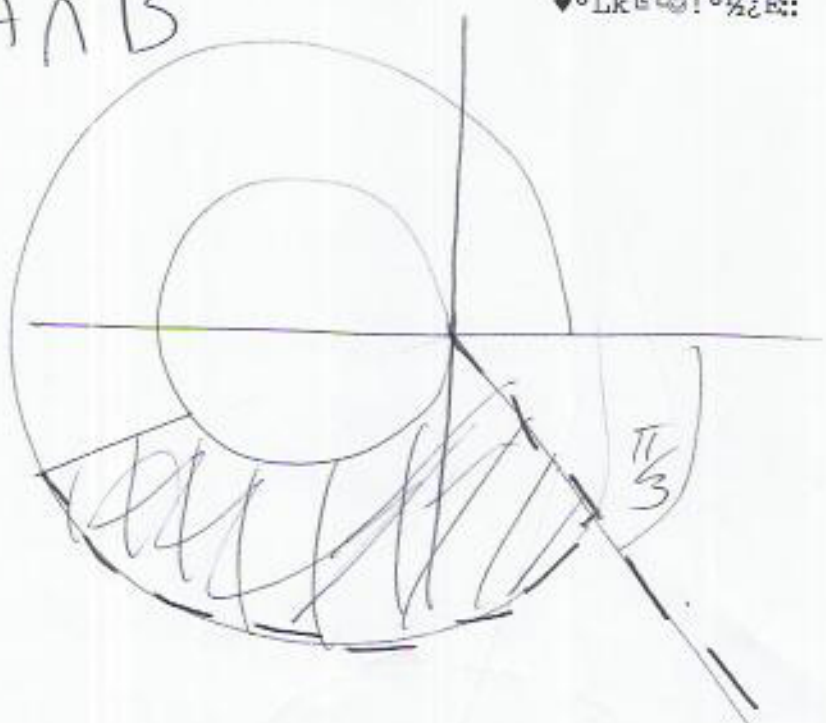
i) $A \cap B$

2.5



~~ii) $1 < |(2+2) + (2-\sqrt{3}\,i)| < 7$~~