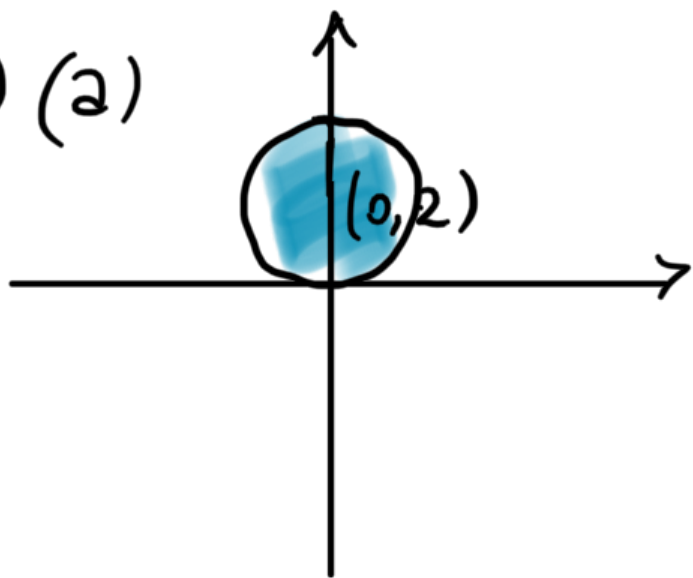


PROBLEM SHEET 2

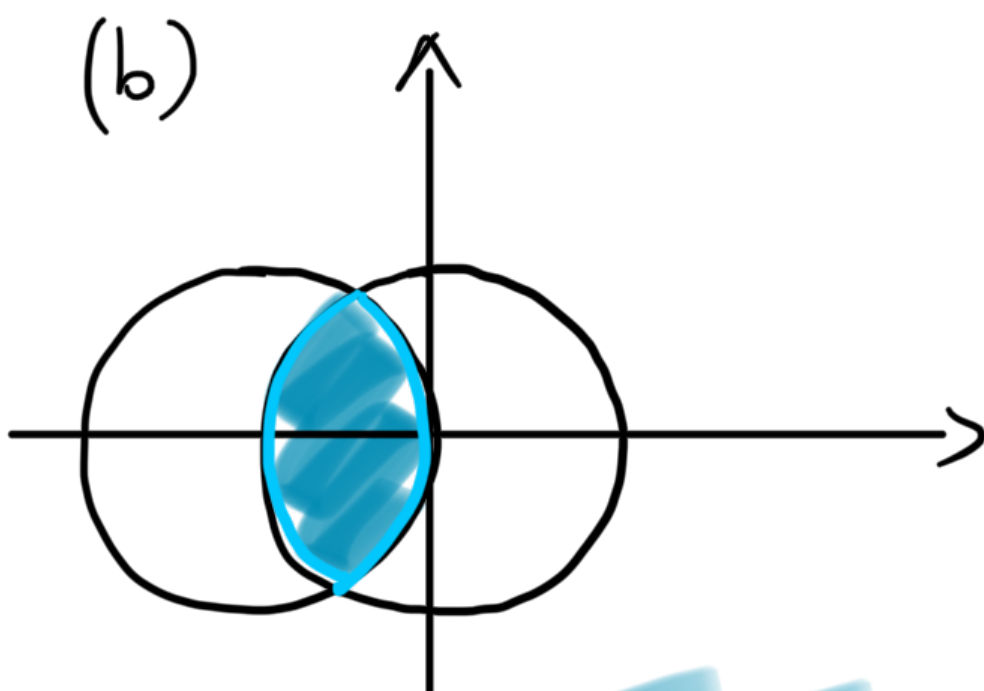
(1) $x^2 - 6x + y^2 + 8y = 0$

(2) $C = (0, -2), r = 2$

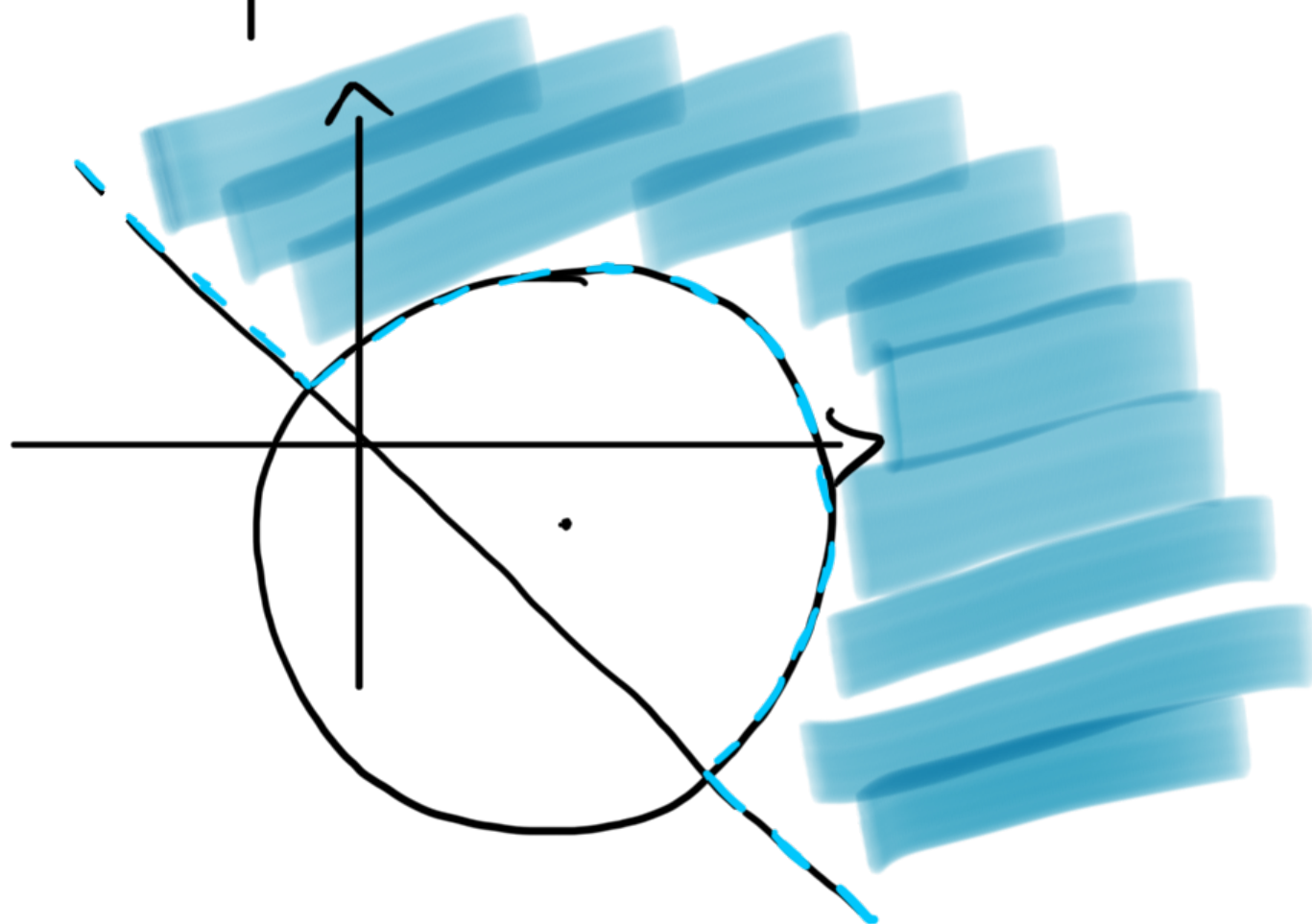
(3) (a)



(b)



(c)



(4) $x^2 + y^2 \leq 4$ and $(x-1)^2 + (y-3)^2 \leq 10$

(5) $y = (x-2)^2 - 2$

(6) $P_1 = \left(\frac{1}{\sqrt{2}}, \sqrt{2} \right), P_2 = \left(-\frac{1}{\sqrt{2}}, -\sqrt{2} \right)$
 $P_3 = \left(\sqrt{2}, \frac{1}{\sqrt{2}} \right), P_4 = \left(-\sqrt{2}, -\frac{1}{\sqrt{2}} \right)$

(8) symmetric with respect to the y-axis

(9) symmetric with respect to the origin

(10)

