DO NOT WRITE IN THIS MARGIN



6 Circles C_1 and C_2 have equations

$$x^2 + y^2 + 6x - 10y + 18 = 0$$
 and $(x-9)^2 + (y+4)^2 - 64 = 0$

respectively. (a) Find the distance between the centres of the circles. [4] P and Q are points on C_1 and C_2 respectively. The distance between P and Q is denoted by d. (b) Find the greatest and least possible values of d. [3]