



6 Circles C_1 and C_2 have equations

$$x^2 + y^2 + 6x - 10y + 18 = 0 \quad \text{and} \quad (x-9)^2 + (y+4)^2 - 64 = 0$$

respectively.

(a) Find the distance between the centres of the circles.

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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 .

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