

7 The point A has coordinates $(p, 1)$ and the point B has coordinates $(9, 3p + 1)$, where p is a constant.

(i) For the case where the distance AB is 13 units, find the possible values of p . [3]

(ii) For the case in which the line with equation $2x + 3y = 9$ is perpendicular to AB , find the value of p . [4]