6 A is the point $(a, 2a - 1)$ and B is the point $(2a + 4, 3a + 9)$, where a is a constant.

    (i) Find, in terms of a, the gradient of a line perpendicular to AB. [3]

    (ii) Given that the distance AB is $\sqrt{(260)}$, find the possible values of a. [4]