11 The coordinates of points A and B are $(-5, 6)$ and $(4, -6)$ respectively. The point C lies on the line AB, between A and B, such that $\frac{AC}{CB} = \frac{1}{2}$.

(a) Find the coordinates of C. [2]

(b) The line CD is perpendicular to AB. Find the equation of CD in the form $y = mx + c$. [4]

(c) The length of BD is $\sqrt{125}$. Find the coordinates of the two possible positions of point D. [6]

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