11 The line $x+2y=10$ intersects the two lines satisfying the equation $|x+y|=2$ at the points A and B.

(a) Show that the point $C(-5,20)$ lies on the perpendicular bisector of the line AB. [8]

(b) The point D also lies on this perpendicular bisector. M is the mid-point of AB. The distance CD is three times the distance of CM. Find the possible coordinates of D. [4]

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