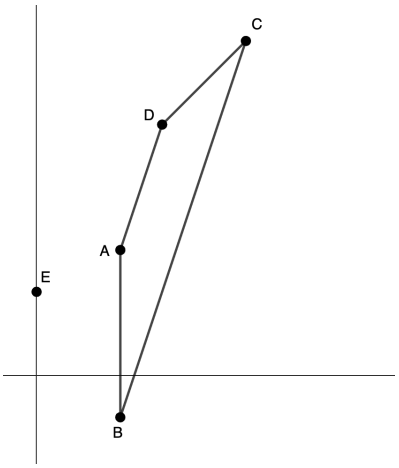
Four points, $A(2,3), B(2,-1), C(5,8), D(3,6)$, are connected to form a trapezoid. The coordinates of point E is $(0,2)$. Find the equation of the line that passes through point E and splits the area of $ABCD$ in half.[1]

Hint: Find the midpoint of the two bases of the trapezoid. Create a segment connecting these midpoints, and let M the midpoint of this segment. The area of a trapezoid can be cut in half when a line crosses both bases and M.



[1] Rikkyo Niiza High School, Saitama