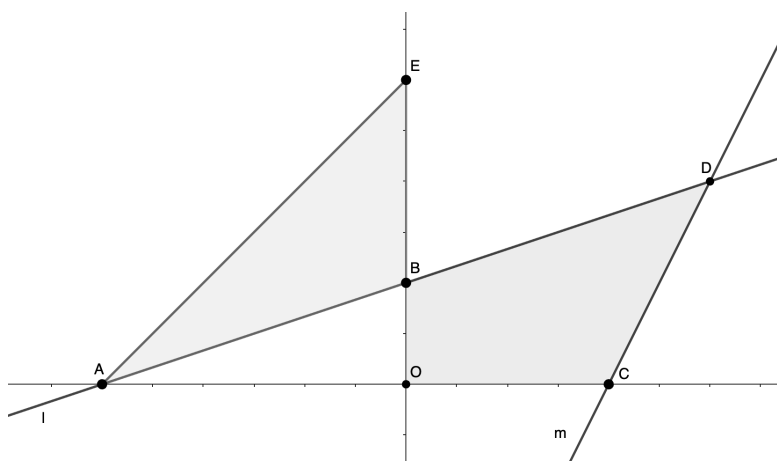


Two points, $A(-6, 0)$ and $B(0, 2)$ lie on line l and the equation of line m is $y = 2x - 8$. Let point C be the intersection of line m and the x-axis, and let point D be the intersection of line m and line l . Point O lies on the origin.¹

(1): Find the coordinates of point D .

(2): Find the coordinates of point E so that the areas of triangle ABE and quadrilateral $BOCD$ are equal. Point E lies on the y-axis, and its y-coordinate is a positive number.

Hint: Finding point E so that $EAO = DAC$ will produce the same answer.



¹Sundai Kofu High School, Yamanashi