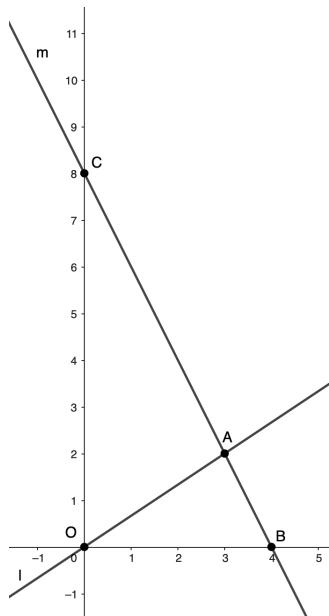


The equation of line l is $y = \frac{2}{3}x$, and the equation of line m is $y = -2x + 8$. The intersection of line l and m is marked as point A , the intersection of line m and the x-axis is marked as point B , and the intersection of line m and the y-axis is marked as point C .¹

(1): Draw a perpendicular line from the origin to m , and let P be the point of intersection with m . Find the coordinates of point P .

Hint: When line $y = ax + b$ and line $y = cx + d$ are perpendicular, $a \times c = -1$.

(2): Find the equation of line n that passes through point A , and splits triangle $OB'C$ into two triangles with equal areas.



¹TRANSLATE SCHOOL