

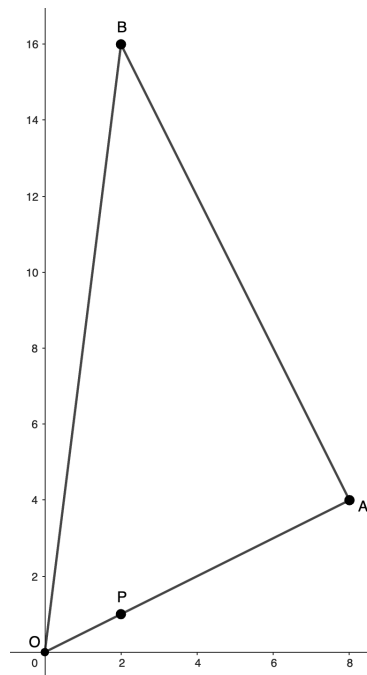
Three points, $O(0, 0)$, $A(8, 4)$, and $B(2, 16)$ exist of on a 2D plane.¹

(1): Find the area of triangle OAB .

(2): Find the equation of a line that passes through point A , and splits triangle OAB into two triangles with equal areas.

(3): Find the equation of a line that passes through point $P(2, 1)$, and splits triangle OAB into two triangles with equal areas.

Hint: Line BP is parallel to the y -axis.



¹TRANSLATE SCHOOL