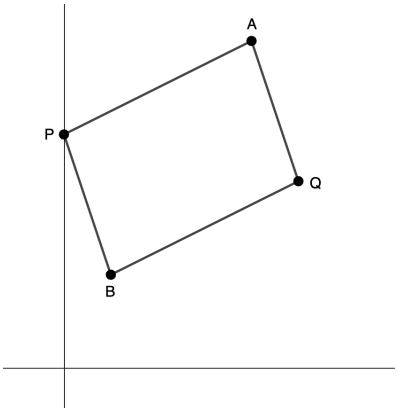
Two fixed points, $A(4, 7)$ and $B(1, 2)$, exist on a plane. Additionally, point P is a point that can move along the y-axis. Depending on the location of P, point Q is placed to create parallelogram $APBQ$. [1]

(1): Find the coordinates of point M, the midpoint of segment AB.

(2): Find the coordinates point Q when segment PQ is as short as possible.
Hint: The midpoint of segment PQ should have the same coordinates as point M, as derived in (1).

(3): Find the equation of the line that passes through $(6, 2)$ and splits the area of $APBQ$ in half.



[1] Aoyama Gakuin High School, Tokyo