We know that if we have two points: $A(x_1, y_1)$ and $B(x_2, y_2)$, then the midpoint O of the segment AB has coordinates: $O\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$.

In our case we have: $A(5,2)$ and $B(-3,-6)$. Then the midpoint O of the segment AB has coordinates: $O\left(\frac{5+(-3)}{2}, \frac{2+(-6)}{2}\right) = O(1,-2)$.

Answer: the coordinates of the midpoint is the midpoint O of the segment AB has coordinates: $O(1,-2)$.