

1. Find the midpoint of $A(2, 0)$ and $B(-4, 9)$.
2. When $M(3, 5)$ is the midpoint of AB , where $A(1, 9)$. What is the coordinates of B ?
3. When $M(a, 4)$ is the midpoint of AB , where $A(2, 3 - a)$. What is the coordinates of B ?
4. C is a point between A and B of line segment AB , where $A(3, 10)$ and $B(10, -11)$. If $AC : CB = 3 : 4$, find the coordinates of C .