

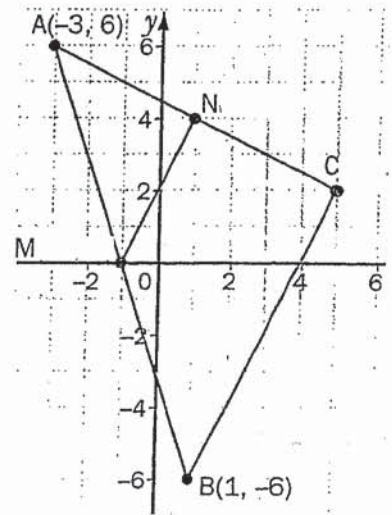
Example 1 Midpoints of Two Sides of a Triangle

The vertices of a triangle are $A(-3, 6)$, $B(1, -6)$, and $C(5, 2)$. If M is the midpoint of AB and N is the midpoint of AC , verify that

- a)** MN is parallel to BC **b)** MN is half the length of BC

Solution

a)



- b)** Use the length formula to find the lengths of MN and BC .