

Question 20975

B is the midpoint of line AC . $AB = 5x$ and $BC = 2x + 3$. Find AB , BC , and AC .

Solution.

Since C is the midpoint, we get

$$AC = BC$$

$$5x = 2x + 3$$

$$x = 1$$

Then

$$AB = BC = 5 \cdot 1 = 5$$

$$AC = 10$$

Answer. $AB = BC = 5, AC = 10$