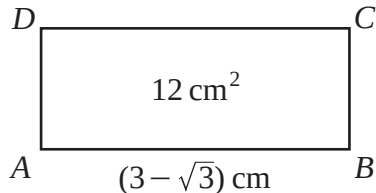


2 In this question you must show detailed reasoning.



The diagram shows the rectangle $ABCD$ where $AB = (3 - \sqrt{3}) \text{ cm}$.

The area of $ABCD$ is 12 cm^2 .

Find the perimeter of $ABCD$. Give your answer in the form $(a + b\sqrt{3}) \text{ cm}$, where a and b are integers to be determined.

[4]