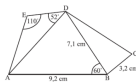


IB Geometry and Trigonometry Problem 004

The figure is not to scale.



The figure shows a pentagon $ABCDE$, where $AB = 9.2 \text{ cm}$, $BC = 3.2 \text{ cm}$, $BD = 7.1 \text{ cm}$, $\angle AED = 110^\circ$, $\angle ADE = 52^\circ$, and $\angle ABD = 60^\circ$.

- Find AD .
- Find DE .
- The area of triangle BCD is 5.68 cm^2 . Find $\angle DBC$.
- Find AC .