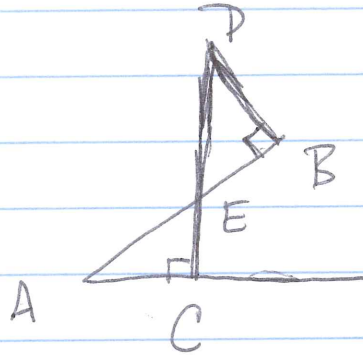


## QUIZ 2A

Fill in the reasons for the steps in the following proof:

GIVEN



$$A * E * B$$

$$D * E * C$$

$$AC \perp CD$$

$$BD \perp AB$$

TO PROVE  $|\angle BAC| = |\angle BDC|$ .

$$1. |\angle BAC| = |\angle EAC| + |\angle AEC| + |\angle ACE| = 180^\circ = |\angle DEB| + |\angle EBD| + |\angle BDC|.$$

$$2. |\angle ACE| = 90^\circ = |\angle EBD| = |\angle ABD|$$

$$3. |\angle AEC| = |\angle DEB|.$$

$$4. \text{Therefore } |\angle BAC| = |\angle EAC| = |\angle BDC| = |\angle BDE|.$$