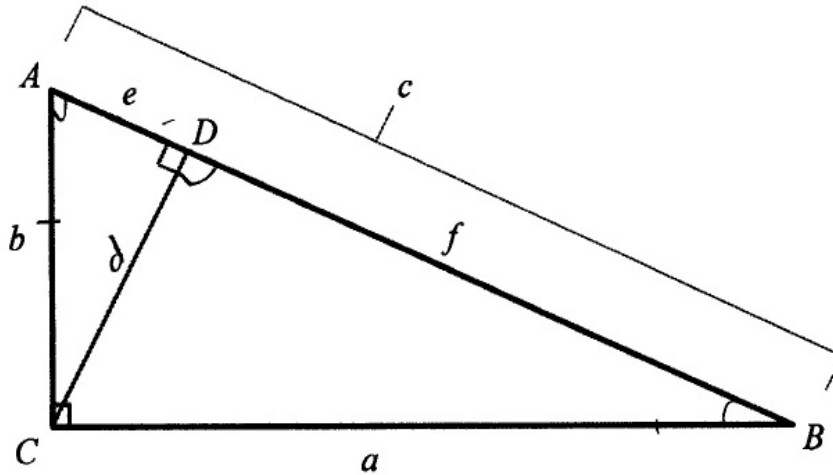


Show that $\triangle ABC \sim \triangle CBD$ and $\triangle ABC \sim \triangle ACD$. Then use these similarities to prove the Pythagorean Theorem ($a^2 + b^2 = c^2$).



Statements

$\angle CDB$ is 90°

$\angle B \cong \angle B$

$\triangle ABC \sim \triangle CBD$

$\angle A \cong \angle A$

$\triangle ABC \sim \triangle ACD$

Reasons

Def. of Right $\angle$ s

Reflexive Property

AA similarity postulate

Reflexive property

AA Similarity postulate