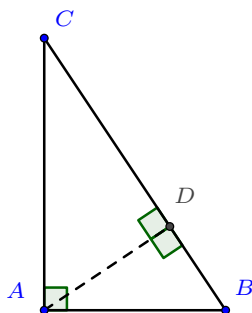# Similar Right Triangles

Proofs.

Problem **1** *Adapted from Ohio's 2017 Geometry released item 17.*

Complete the following proof that $\triangle DAC$ is similar to $\triangle DBA$:

(a) $\triangle ABC \sim \triangle \boxed{DBA}$ by AA because they share $\angle B$ and they each have a right angle.

(b) $\triangle ABC \sim \triangle \boxed{DAC}$ by AA because they share $\angle C$ and they each have a right angle.

(c) $\triangle DAC \sim \triangle \boxed{DBA}$ because they are both similar to $\triangle ABC$.

> *Fixnote: Need to prompt for AA in the first two steps.*
> *The 2017 EOC item calls AA a postulate, which it is not.*
> *Should AA be called a criterion? a theorem? a condition?*

Learning outcomes:
Author(s): Brad Findell