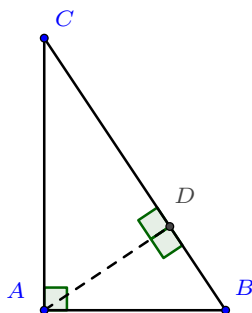


Similar Right Triangles

Proofs updated.

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 similarity ✓/ CPCTC/ right triangle similarity) because they share $\angle B$ and they each have a right angle.
- (b) $\triangle ABC \sim \triangle DAC$ for the same reason because they share ($\angle A$ / $\angle B$ / $\angle C$ ✓) and they each have a right angle.
- (c) $\triangle DAC \sim \triangle \boxed{DBA}$ because they are both similar to $\triangle ABC$.