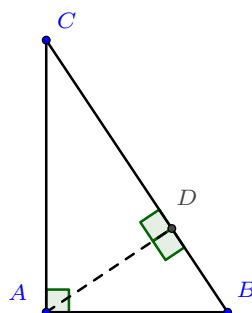


# Similar Right Triangles

*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  $\triangle ABC$ .

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