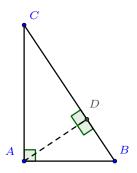
## Similar Right Triangles

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  $\triangle ABC$ .

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