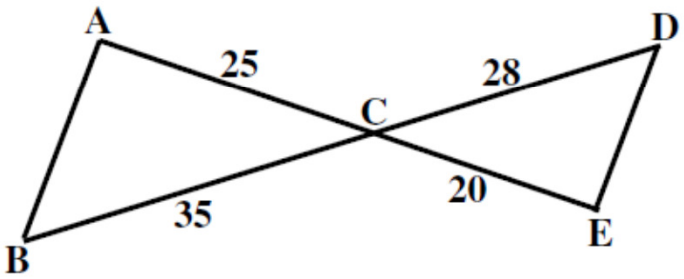
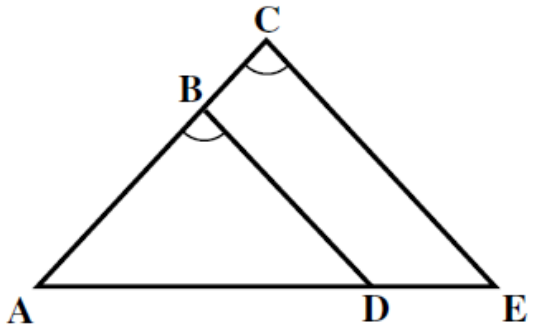
Mastery Check

Determine whether the triangles can be proved similar. If they are, provide a reason by stating a shortcut. Otherwise, state why the triangles are not similar.

1.



2.



3. **Mirror and Similar Triangles** In order to estimate the height of a tall pine tree, a student places a mirror on the ground and stands where she can see the top of the tree, as shown.

a) What shortcut can be used to show that the triangles are similar?

b) What is the height of the pine tree?