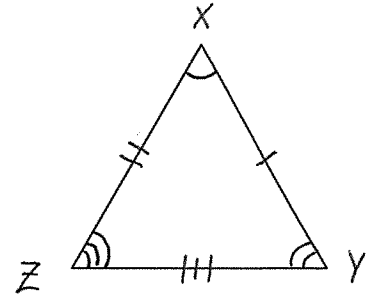
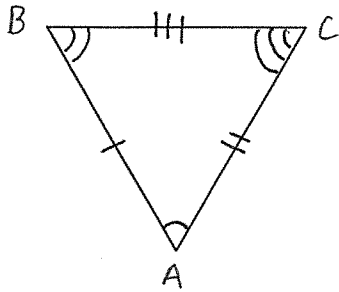
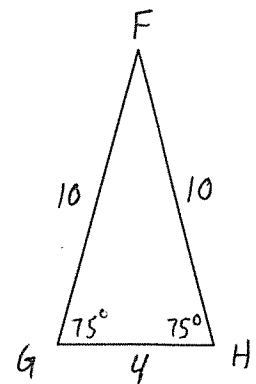
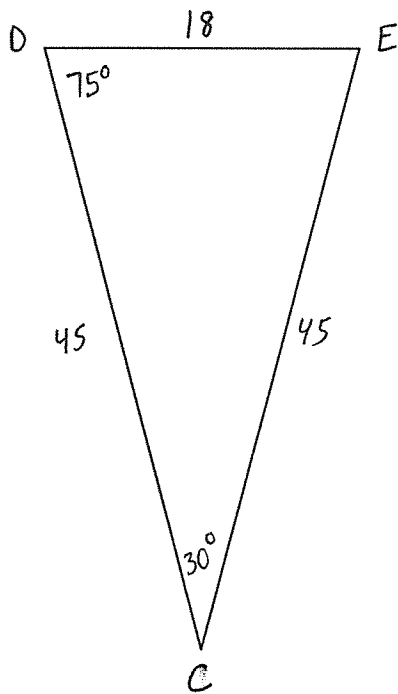


Unit 4: Similarities
PRE-TEST

For the following set of triangles provide CONGRUENCE statements showing $\Delta ABC \cong \Delta XYZ$:
1. This is NOT a proof!



For the following set of triangles provide SIMILARITY statements showing $\Delta CDE \sim \Delta FGH$:
2. This is NOT a proof!



Prove the following triangles are CONGRUENT using two different techniques (SSS, SAS, ASA, AAS, or HL):

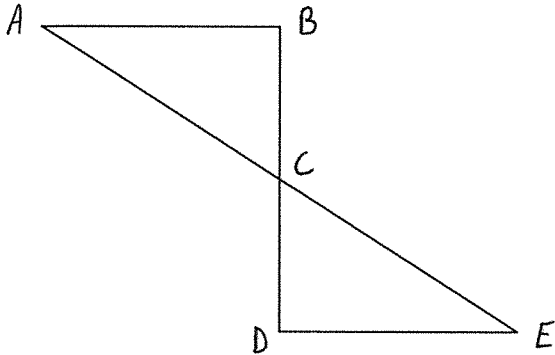
3. Given: C is the midpoint of \overline{AE} & \overline{BD}

$$\overline{AB} \parallel \overline{ED}$$

$$\overline{BD} \perp \overline{AB}$$

$$\overline{BD} \perp \overline{DE}$$

Prove: $\triangle ABC \cong \triangle DEC$



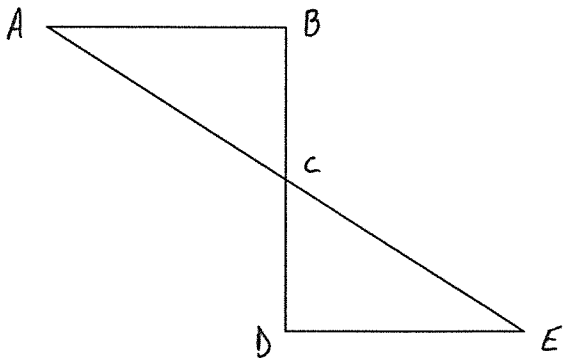
4. Given: C is the midpoint of \overline{AE} & \overline{BD}

$$\overline{AB} \parallel \overline{ED}$$

$$\overline{BD} \perp \overline{AB}$$

$$\overline{BD} \perp \overline{DE}$$

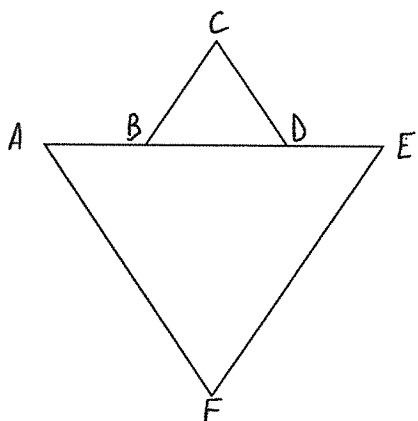
Prove: $\triangle ABC \cong \triangle DEC$



Prove the following triangles are SIMILARITY using two different techniques (SSS, SAS, or AA):

5. Given: $\overline{AB} = 5$ $\angle A = 55^\circ$
 $\overline{BD} = 5$ $\angle F = 65^\circ$
 $\overline{DE} = 5$ $\angle C = 65^\circ$
 $\overline{BC} = 3$ $\angle CBD = 60^\circ$
 $\overline{CD} = 3$
 $\overline{AF} = 9$
 $\overline{EF} = 9$

Prove: $\triangle FEA \sim \triangle CBD$



6. Given: $\overline{AB} = 5$ $\angle A = 55^\circ$
 $\overline{BD} = 5$ $\angle F = 65^\circ$
 $\overline{DE} = 5$ $\angle C = 65^\circ$
 $\overline{BC} = 3$ $\angle CBD = 60^\circ$
 $\overline{CD} = 3$
 $\overline{AF} = 9$
 $\overline{EF} = 9$

Prove: $\triangle FEA \sim \triangle CBD$

