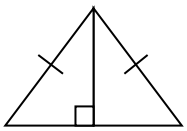
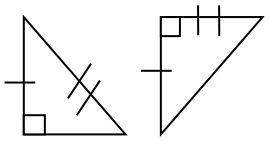
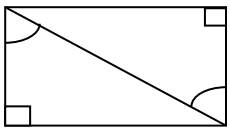
Formal Geometry **4.5 Worksheet** **Name**_____

For #1 – 3, determine whether or not each pair of triangles is congruent. If yes, tell which postulate or theorem applies.

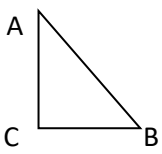
1) 

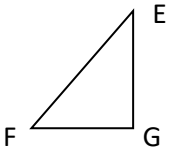
2) 

3) 

For #4 – 7, write a two-column proof.

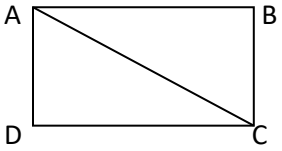
4) Given: $\overline{AC} \perp \overline{CB}, \overline{EG} \perp \overline{FG}, \overline{AB} \cong \overline{EF}$ and $\overline{CB} \cong \overline{GF}$
Prove: $\Delta ABC \cong \Delta EFG$





Statements	Reasons

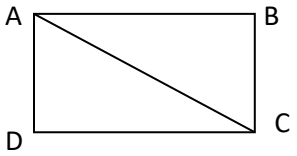
5) Given: $\overline{AB} \cong \overline{DC}, \overline{AD} \perp \overline{DC}$, and $\overline{AB} \perp \overline{BC}$
Prove: $\Delta ABC \cong \Delta CDA$



Statements	Reasons

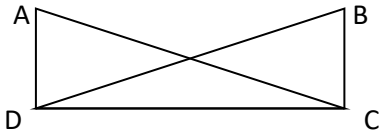
Formal Geometry **4.5 Worksheet** **Name**_____

6) Given: $\overline{AB} \parallel \overline{DC}$, $\overline{AD} \perp \overline{DC}$, and $\overline{AB} \perp \overline{BC}$
Prove: $\Delta ABC \cong \Delta CDA$



Statements	Reasons

7) Given: $\overline{AC} \cong \overline{BD}$, $\overline{AD} \perp \overline{DC}$, and $\overline{BC} \perp \overline{CD}$
Prove: $\Delta ADC \cong \Delta BCD$



Statements	Reasons

8) Find the measure of the sides of triangle JKL, and then classify the triangle by its sides:
J(4, 6), K(4, 11), and L(9, 6)

9) Find *x* and *y* if $\Delta PQS \cong \Delta RQS$.