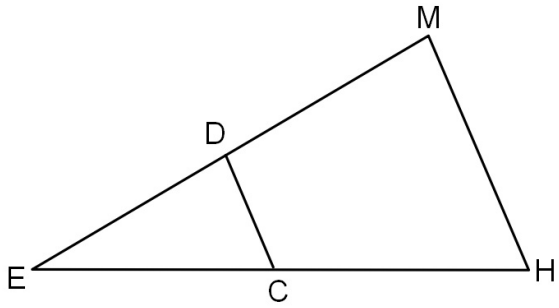
Geometry Bellwork Tuesday, December 17, 2013

1. Given: $\overline{MH} \parallel \overline{DC}$



a. Why is $\angle EMH \cong \angle EDC$?

b. Why is $\angle EHM \cong \angle ECD$?

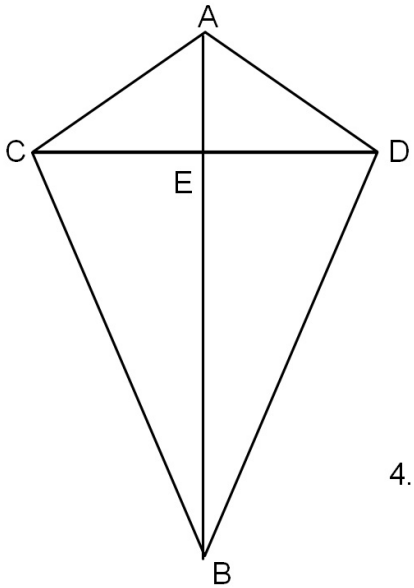
c. Name the two triangles in the diagram.

$\triangle$_____ & $\triangle$_____

d. What is the third angle in each triangle? What is true about this third pair of angles?

e. Are these triangles congruent? Explain your answer.

2. The figure below is a kite. Diagonal $\overline{AB}$ is the $\perp$ bisector of diagonal $\overline{CD}$ and also bisects $\angle$ CAD and $\angle$ CBD. Write a congruence statement for each pair of triangles in this figure that are congruent and give a reason.



3. What is true about $\overline{AC}$ and $\overline{AD}$?

4. What is true about $\overline{BC}$ and $\overline{BD}$?