**Activity 2.5.3 Identifying Angle Pairs**

AB is a transversal intersection line $\overleftrightarrow{CE}$ at *B* and line $\overleftrightarrow{HD}$ at *A*. Use the figure below to answer these questions:

1. $∠EBA$ and $∠\\_\\_\\_\\_\\_\\_\\_\\_\\_ $are a pair of corresponding angles.
2. $∠FBC$ and $∠\\_\\_\\_\\_\\_\\_\\_\\_\\_$ are a pair of vertical angles.
3. Name another pair of vertical angles.
4. $∠CBA$ and $∠\\_\\_\\_\\_\\_\\_\\_\\_\\_$ are a pair of alternate interior angles.
5. $∠BAD$ and $∠\\_\\_\\_\\_\\_\\_\\_\\_\\_$ are a linear pair of angles.
6. Name one pair of same side interior angles.
7. Name an angle that must be congruent to angle $∠GAH.$



In this figure, *M* is a point on $\overleftrightarrow{JL}$

1. Suppose m$∠KMJ=55°.$ Find m$∠LMK.$
2. Suppose m$∠LMK$ is twice the size of m$∠KMJ.$ Find the measure of each angle.
3. Suppose m$∠KMJ$ is 80° less than m$∠LMK$. Find the measure of each angle.
4. Do you agree or disagree with this statement “If $∠KMJ$ is an acute angle, then m$∠LMK$ must be an obtuse angle”? Explain your reasoning.