

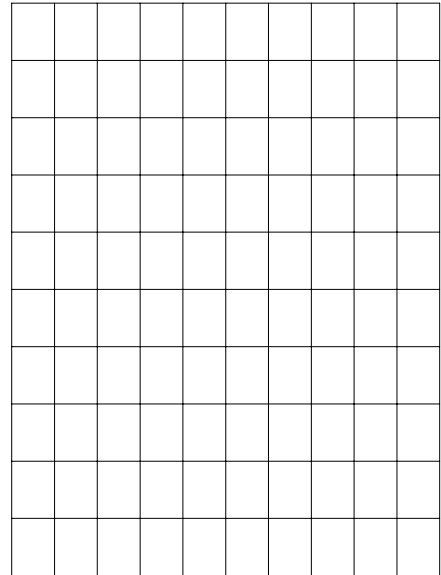
Name _____

Take Home Questions: In each of the following problems you will be asked about how you know something. Think about the ideas you learned in geometry this year and tell how one of these ideas helps you answer the question “How Do You Know?” If you have trouble getting started, draw a sketch and then think what the sketch shows you. You can write equations, quote conjectures from class, or use a combination of the two as part of your answer. (6 points each or 24 points)

1. HOW DO YOU KNOW THAT the two acute angles of a right triangle are complementary?

2. HOW DO YOU KNOW THAT a triangle can be made using line segments of length 1.7, 2, and 2.2?

3. HOW DO YOU KNOW that triangle TUB, whose vertices are T(-1,4), U(5,-2), and B(2,7), is a right triangle?



4. HOW DO YOU KNOW that if you have just reasoned that $\triangle ABC \cong \triangle XYZ$ because $\overline{BC} \cong \overline{YZ}$, $\angle B \cong \angle Y$ and $\angle C \cong \angle Z$, then $\overline{AC} \cong \overline{XZ}$?