Math 302-001
Solutions are due Monday, September 15

1. In halfplane H, \( \vec{BA} \) and \( \vec{BE} \) are opposite rays, \( \angle ABG \equiv \angle KBG \) and \( \angle KBD \equiv \angle DBE \). Find \( m(\angle GBD) \). Justify your answer.

2. Prove: If \( \angle BAC \) is a right angle, A is between B and D, A is between C and E, then \( \angle BAE \), \( \angle DAE \), and \( \angle CAD \) are right angles.

3. If one of a pair of vertical angles has measure \( x \), write a formula for the measure of the other three angles formed. Justify your answer.

4. Prove Proposition 1.4.11

5. Problem 1 on Page 28. (Write a proof or justify the steps I have outlined on the handout for this problem.)