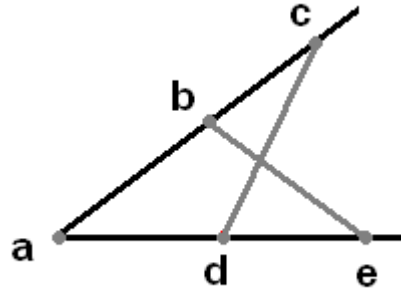# Drawings and additional comments/hints

3. You may assume that the four lines ab, ad, cd, be are all distinct.

Also, if we can prove that the line be and segment (cd) have a point in common, switching the roles of various points implies that the line cd and segment (be) have a point in common.

4. The problem should state that the ray $[AD$ bisects the angle.