1. A rectangle is a four-sided figure such that the four interior angles are all right angles.

    a) Prove that the opposite sides of a rectangle have equal length. Hint: You can use ASA (I-26).

    b) Prove that the diagonals have equal length.

    c) Prove that the diagonals bisect each other.

2. Prove that the exterior angles of a regular pentagon add to four right angles.