

4. Therefore the angle BAC is not equal to the angle EDF.
 5. And the angle BAC is not less than the angle EDF, because then the base BC would be less than the base EF. (*Proposition 24, Book I.*)
 6. But the base BC is not less than the base EF. (*Hypothesis 2.*)
 7. Therefore the angle BAC is not less than the angle EDF.
 8. And it was shewn that the angle BAC is not equal to the angle EDF. (*Demonstration 4.*)
 9. Therefore the angle BAC must be greater than the angle EDF.
 CONCLUSION.—Therefore, if two triangles, &c. (*See Enunciation.*) Which was to be shewn.

PROPOSITION 26.—THEOREM.

If two triangles have two angles of the one equal to two angles of the other, each to each, and one side equal to one side; viz., either the sides adjacent to the equal angles (1), or the sides opposite to the equal angles (2), in each, then shall the other sides be equal, each to each, and also the third angle of the one to the third angle of the other.

HYPOTHESIS.—Let ABC, DEF, be two triangles, which have—

1. The angles ABC, BCA, equal to the angles DEF, EFD, each to each; viz., ABC to DEF; and BCA to EFD.
2. Also one side equal to one side.

CASE 1.—First, let those sides be equal which are adjacent to the angles that are equal in the two triangles; viz., BC equal to EF.

SEQUENCE.—1. The other sides shall be equal each to each; viz., AB to DE, and AC to DF.

2. And the third angle BAC, shall be equal to the third angle EDF.

HYPOTHESIS.—(II.)
 For if AB be not equal to DE, one of them must be greater than the other: let AB be the greater of the two.

CONSTRUCTION.—1.
 Make BG equal to DF. (*Proposition 3, Book I.*)

