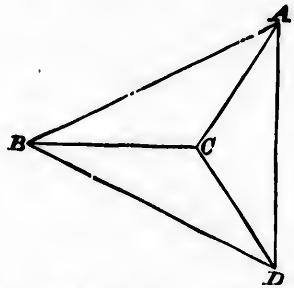
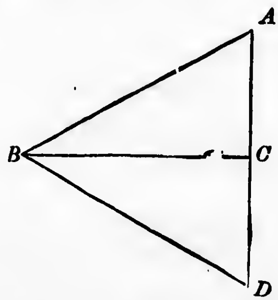
CASE II. When the line joining the vertices does not pass through BC.



Then in $\triangle ABD$, $\because BD=BA$, $\therefore \angle BAD = \angle BDA$, I. A.
And in $\triangle ACD$, $\because CD=CA$, $\therefore \angle CAD = \angle CDA$, I. A.
Hence since the whole angles BAD, BDA are equal.
and parts of these CAD, CDA are equal.
$\therefore$ the remainders BAC, BDC are equal. Ax. 3.
Then, as in Case I., the equality of the original triangles may be proved.

CASE III. When AC and CD are in the same straight line.



Then in $\triangle ABD$, $\because BD=BA$, $\therefore \angle BAD = \angle BDA$, I. A.
that is, $\angle BAC = \angle BDC$.

Then, as in Case I., the equality of the original triangles may be proved.

Q. E. D.