Proposition I.14
If with any straight line, and at a point on it, two straight lines not lying on the same side make the adjacent angles equal to two right angles, the two straight lines will be in a straight line with one another.

Given a line intersecting another line, they sum to two right angles [I.13] We have that $\angle CBA + \angle DBA = 2$ right angles.

Claim: $CB$ and $BD$ lie on the same straight line (namely $CBD$)

Proof by contradiction: Suppose $CB$ and $BD$ do not lie on the same line. Draw $BE$ through $E$ such that $CBE$ all lie on the same line. We know $\angle CBA + \angle EBA = 2$ right angles [I.13]

$\angle CBA + \angle DBA = 2$ right angles, by assumption

$\angle CBA + \angle EBA = \angle CBA + \angle DBA$ [Post. 4, C.N. 1]

Subtract $\angle CBA$ from each, leaving: $\angle EBA = \angle DBA$ [C.N. 3]

But we have reached a contradiction, since $\angle EBA$ is a part of $\angle DBA$. [C.N. 5]

Therefore, we have shown that $CB$ and $BD$ lie on the same straight line.
Proposition I.14 Graph

A

B

C ——— D

E