

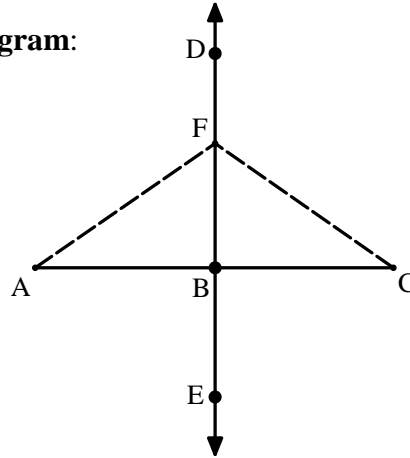
Common Core Geometry Proof - Lines and Angles_4

Points on Perpendicular Bisector

Theorem: If a point lies on the perpendicular bisector of a line segment, then it is equidistant from the segment's endpoints.

Given: \overleftrightarrow{DE} is the perpendicular bisector of \overline{AC} ,
 intersecting at point B
 F is a point on \overleftrightarrow{DE}

Diagram:



Prove: $\overline{AF} \cong \overline{CF}$

| Statement | Reason |
|-----------|--------|
| | |