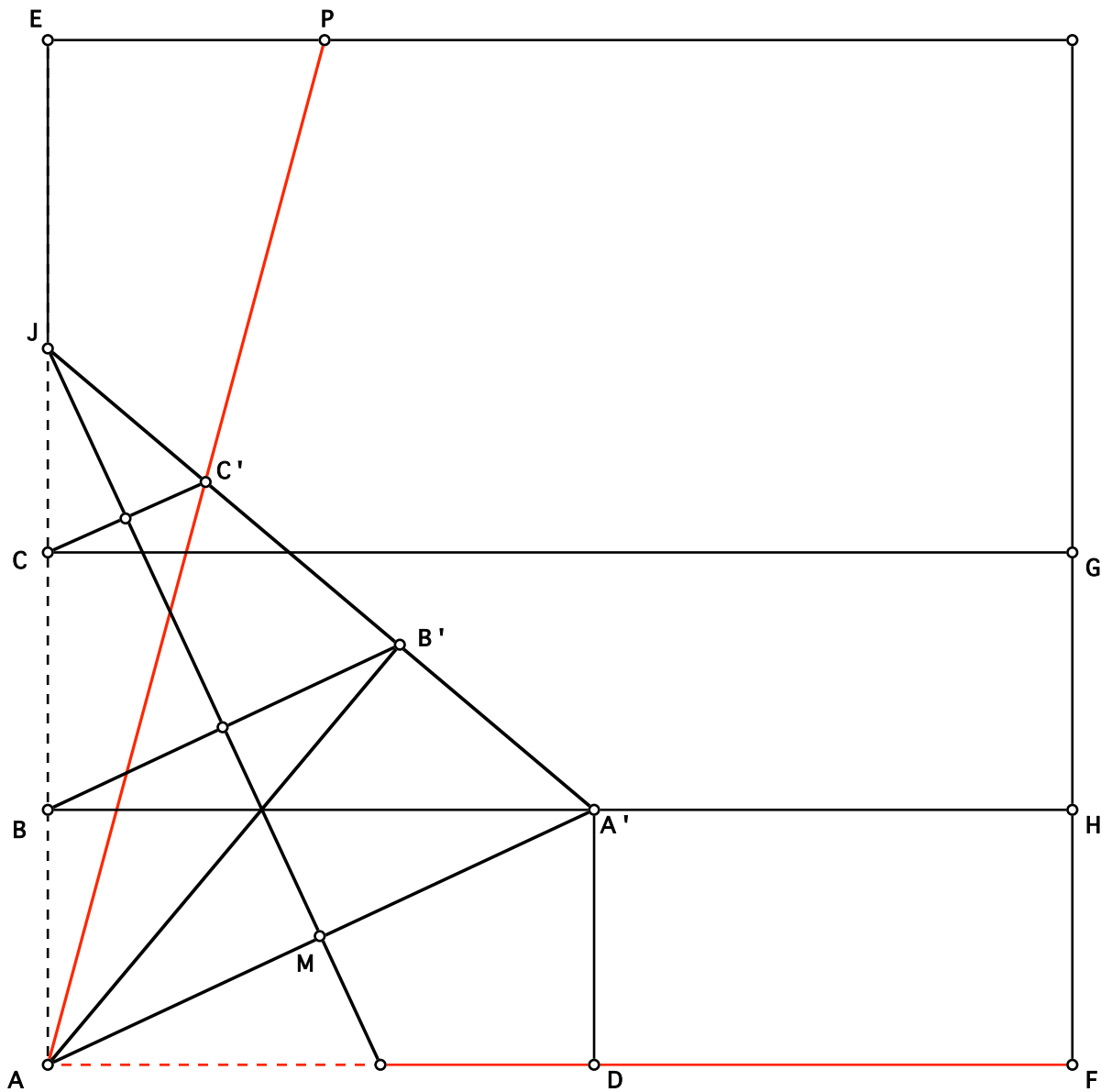


Angle PAB depicts an "arbitrary" acute angle. The folding to trisect angle PAB has been done, producing:

1. Congruent segments AB, BC, A'D
2. The crease JM made to be the perpendicular bisector of AA', BB', and CC'.



The following steps can be used to show that the angle $A'D$ trisects angle PAD :

1. Triangle ADA' similar to Triangle JMA because ...

2. Triangles AMJ and $A'MJ$ are congruent because ...

3. Angles $B'A'A$ and $DA'A$ are congruent because ...

4. Segments BA and $B'A'$ are congruent because ...

5. Triangles $A'B'A$ and $A'DA$ are congruent because ...

6. Triangles $C'B'A$ and $A'B'A$ are congruent because ...

7. Angle $A'AD$ is the trisector of angle PAD because ...