

If the diagonals \overline{AC} and \overline{BD} bisect each other at E , then $\overline{AE} \cong \overline{EC}$ and $\overline{BE} \cong \overline{ED}$. Since $\overline{AC} \cong \overline{BD}$, all
[1] four segments are equal. Thus, the triangles formed are isosceles.

[2] only if it is also equilateral

[3] Check students' work.

[4] the angles have equal measures