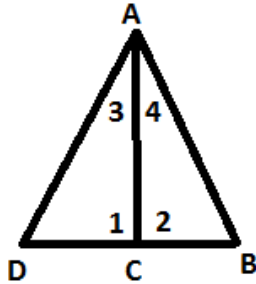


Name: _____
 Date: _____
 Class: _____

Geometry
 Unit 8
 HW 8-4

Using the given information and the diagram write a proof that shows the “Prove” statement is true.

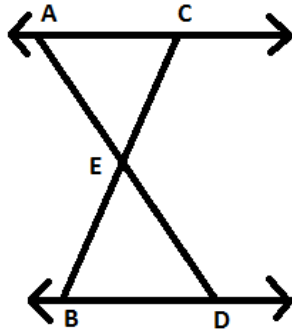
1)



Given: \overline{AC} is a median
 $\overline{AC} \perp \overline{BD}$

Prove: $\triangle ACD \cong \triangle ACB$

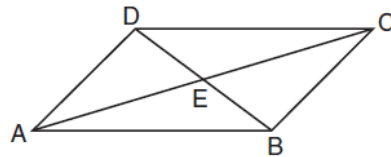
2)



Given: $\overline{AC} \parallel \overline{BD}$
 $\overline{AC} \cong \overline{BD}$

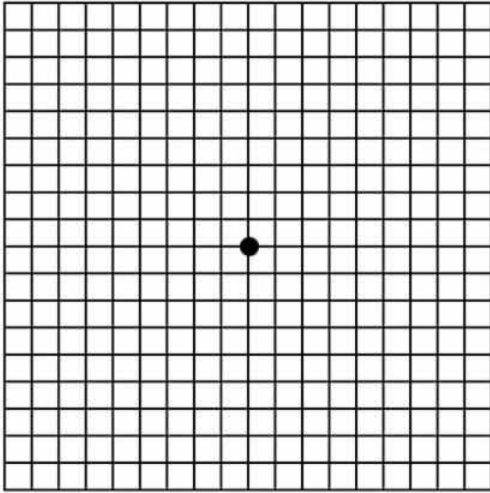
Prove: E is the midpoint of \overline{CB}

3) In parallelogram $ABCD$ shown below, diagonals \overline{AC} and \overline{BD} intersect at E .

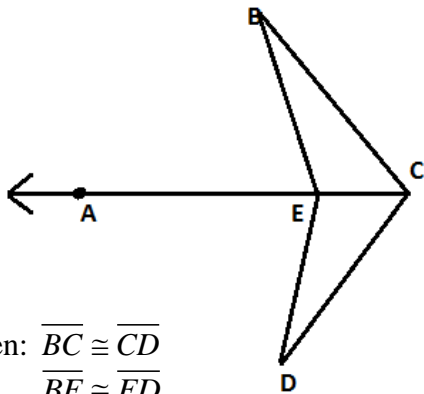


Prove: $\angle ACD \cong \angle CAB$

4) Quadrilateral ABCD has points A (-3, -1), B (-2, 5), C (2, 5), and D (1, 1) Prove ABCD is an isosceles trapezoid.



5)



Given: $\overline{BC} \cong \overline{CD}$

$\overline{BE} \cong \overline{ED}$

Prove: \overline{AC} bisects $\angle BCD$