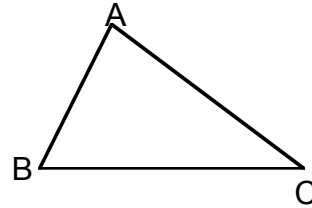


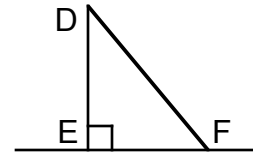
Honors Geometry

Indirect Proofs

1. Prove that in scalene triangle ABC the altitude from $\angle A$ does NOT bisect \overline{BC} .



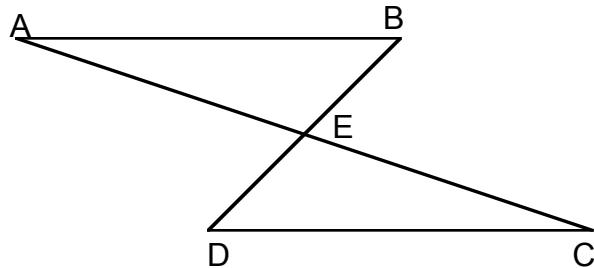
2. Given: $\overline{DE} \perp \overline{EF}$, prove \overline{EF} *not* $\perp \overline{DF}$



3. Prove indirectly: Given a point and a line there can only be one parallel to the line passing through the point. (Assume more than one parallel and use parallel transitivity).

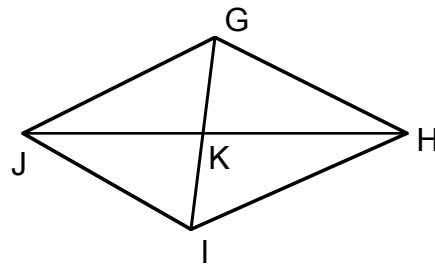
4. Given: E mdpt \overline{AC} ,
 \overline{AB} not $\parallel \overline{CD}$

Prove: E *not* mdpt \overline{BD}



5. Given: $\overline{GJ} \cong \overline{GH}$ and \overline{GI} not $\perp \overline{JK}$

Prove: \overline{JI} not $\cong \overline{HI}$



6. Given: Diagram as shown

Prove: $\angle P$ not $\cong \angle 2$

