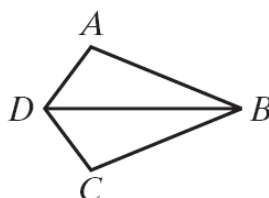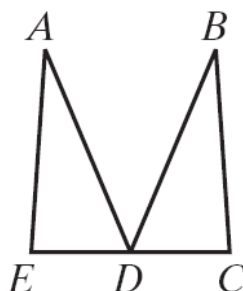**Name:** _____

Congruent Triangles

1)   Given: $\overrightarrow{DB}$ bisects $\angle ADC$ and $\overline{BD}$ bisects $\angle ABC$
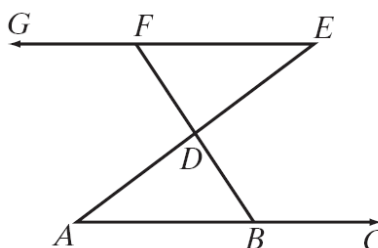
Prove: $\triangle ABD \cong \triangle CBD$

2)   Given: $\angle E \cong \angle C$, $\angle EDA \cong \angle CDB$ and D is the midpoint of $\overline{EC}$

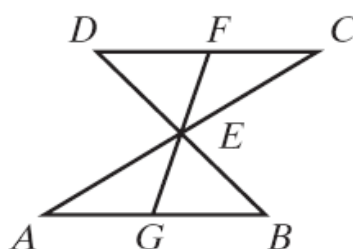Prove: $\triangle DAE \cong \triangle DBC$

3)   Given: $\angle DBC \cong \angle GFD$ and $\overline{AE}$ bisects $\overline{FB}$ at D
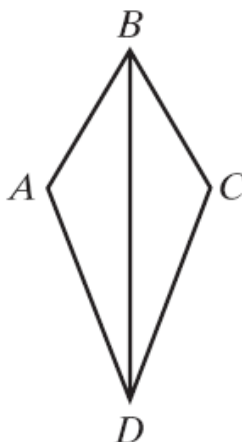
Prove: $\triangle DFE \cong \triangle DBA$

4)   Given: $\overline{AEC}$ and $\overline{DEB}$ bisect each other, $\overline{FEG}$ intersects $\overline{AB}$ at G and $\overline{CD}$ at F.
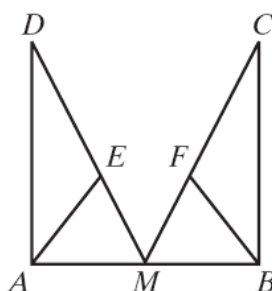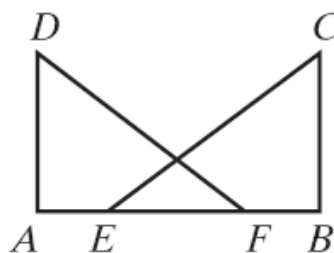Prove: E is the midpoint of $\overline{FEG}$

5) Given: $\overline{BC} \cong \overline{BA}$ and $\overrightarrow{BD}$ bisects $\angle CBA$.
Prove: $\overrightarrow{DB}$ bisects $\angle CDA$.

6) Given: $\triangle AME \cong \triangle BMF$ and $\overline{DE} \cong \overline{CF}$
Prove: $\overline{AD} \cong \overline{BC}$

7) Given: $\overline{AEFB}$, $\overline{AE} \cong \overline{FB}$, $\overline{DA} \cong \overline{CB}$, and $\angle A$ and $\angle B$ are right angles.
Prove:
1) $\triangle DAF \cong \triangle CBE$
2) $\overline{DF} \cong \overline{CE}$

8) Given: $\overline{ABCD}$, $\angle BAE \cong \angle CBF$, $\angle BCE \cong \angle CDF$, $\overline{AB} \cong \overline{CD}$
Prove: $\overline{AE} \cong \overline{BF}$ and $\angle E \cong \angle F$