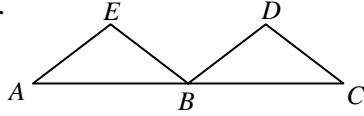
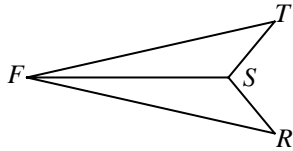


Please work these problems on a separate piece of paper! Use the information given in each situation to find two congruent triangles. Explain why they are congruent. If you cannot determine whether the triangles are congruent, then state “not necessarily congruent” and give a brief reason why.

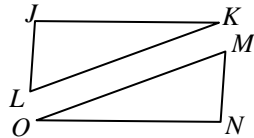
1. B is the midpoint of \overline{AC} , triangle AEB and BDC are both isosceles triangles, and $AE = BD$.



2. $\overline{FT} \cong \overline{FR}$ and \overline{FS} bisects angle TFR .



3. $\angle J \cong \angle N$, $\angle M \cong \angle L$, and $\angle K \cong \angle O$.



4. $\overline{RS} \cong \overline{DE}$, $\overline{RT} \cong \overline{DF}$, and $\angle R \cong \angle D$. [Hint: draw a careful diagram of your own.]

5. $\angle R \cong \angle D$, $\overline{RT} \cong \overline{DF}$, and $\overline{ST} \cong \overline{EF}$.

6. $\overline{WX} \cong \overline{YX}$ and $\angle 1 \cong \angle 2$. Explain why Z is the midpoint of segment WY .

