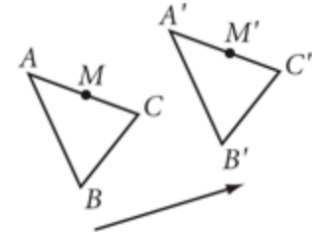# Geometry HW 8/23, due Friday 8/26 – Translations and Rotations

22. $\triangle ABC$ with M, the midpoint of $\overline{AC}$, are translated to create $\triangle A'B'C'$. Which of the following statements are true? Explain how you know.

   a. $\overline{AB} \cong \overline{A'B'}$

   b. $\angle C \cong \angle C'$

   c. M' is the midpoint of $A'C'$

   d. $\overline{BB'} \cong \overline{MM'}$

23. $\triangle DEF$ with $\overline{EG}$ the bisector of $\angle E$ are rotated to create $\triangle D'E'F'$. Which of the following statements are true? Explain how you know.

   a. $\overline{DF} \cong \overline{D'F'}$

   b. $\angle F \cong \angle F'$

   c. $\angle DEG \cong \angle D'E'G'$

   d. $\overline{DD'} \cong \overline{GG'}$