26 In the diagram below, $\triangle ABC$ has coordinates A(1,1), B(4,1), and C(4,5). Graph and label $\triangle A''B''C''$, the image of $\triangle ABC$ after the translation five units to the right and two units up followed by the reflection over the line y = 0.



27 A regular hexagon is rotated in a counterclockwise direction about its center. Determine and state the minimum number of degrees in the rotation such that the hexagon will coincide with itself.

28 In the diagram of $\triangle ABC$ shown below, use a compass and straightedge to construct the median to \overline{AB} . [Leave all construction marks.]



29 Triangle MNP is the image of triangle JKL after a 120° counterclockwise rotation about point Q. If the measure of angle L is 47° and the measure of angle N is 57°, determine the measure of angle M. Explain how you arrived at your answer.



30 A circle has a center at (1,-2) and radius of 4. Does the point (3.4,1.2) lie on the circle? Justify your answer.

31 In the diagram below, a window of a house is 15 feet above the ground. A ladder is placed against the house with its base at an angle of 75° with the ground. Determine and state the length of the ladder to the *nearest tenth of a foot*.

