Name_____ Date _____

Chapter 6

Quiz

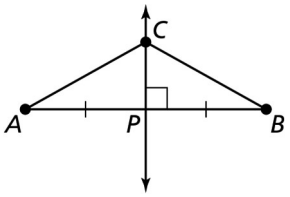
For use after Section 6.3

1. Find the coordinates of the circumcenter of $\triangle ABC$ with vertices $A(-2, 3)$, $B(-2, 7)$, and $C(5, -4)$.

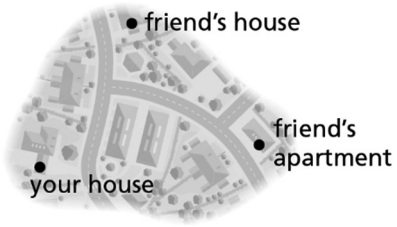
2. Find the coordinates of the centroid of $\triangle RST$ with vertices $R(-3, 1)$, $S(-3, 0)$, and $T(-6, -1)$.

3. **Given** $\overleftrightarrow{CP}$ is the perpendicular bisector of $\overline{AB}$.

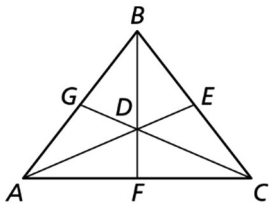
Prove $CA = CB$



4. You and two friends plan to meet to run together. You want the meeting place to be the same distance from each person's residence. Explain how you can use the diagram to locate the meeting place.



5. Point D is the centroid of $\triangle ABC$, $BD = 3x + 2$, and $DF = 2x$. Find the value of x.



6. Draw a triangle and find the orthocenter, centroid, and circumcenter. What do you notice?