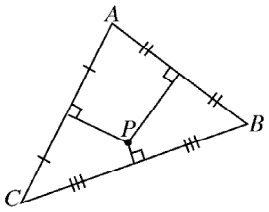
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

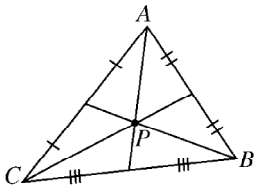
Triangle Perpendicular Bisectors

____ 1. Which diagram shows a point P an equal distance from points A, B, and C?

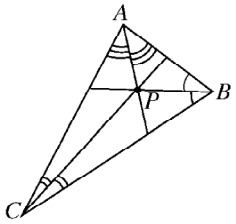
A.



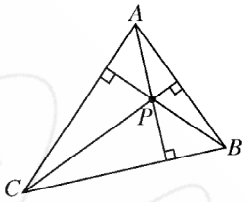
C.



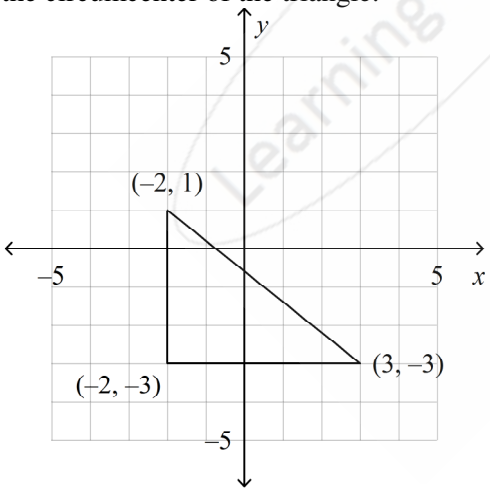
B.



D.



____ 2. Find the circumcenter of the triangle.

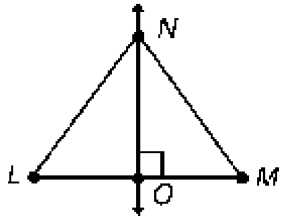


A. $(\frac{1}{2}, -1)$ B. $(-2, -1)$ C. $(-1, \frac{1}{2})$ D. $(\frac{1}{2}, -3)$

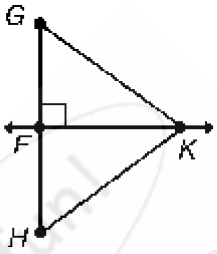
____ 3. Find the circumcenter of ΔEFG with $E(4, 6)$, $F(4, 2)$, and $G(6, 2)$.

A. (5, 2) B. (4, 5) C. (5, 4) D. (4, 5)

4. $\overleftrightarrow{NO}$ is the perpendicular bisector of $\overline{LM}$. If $OM = 5$ and $LN = 13$, then $LO =$_____ and $MN =$_____. Explain your solutions.



____ 5. If $\overleftrightarrow{KF}$ is the perpendicular bisector of $\overline{GH}$, then $\angle KGF \cong$ _____.



A. $\angle HFK$ B. $\angle KHF$ C. $\overline{FK}$ D. $\angle GKF$

Triangle Perpendicular Bisectors
Answer Section

1. A
2. A
3. C
4. $LO = 5$, $MN = 13$; $LO = OM$ by definition of bisector and $MN = LN$ by the Perpendicular Bisector Theorem.
5. B