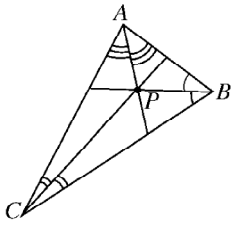
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

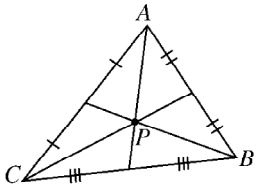
Triangle Perpendicular Bisectors

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

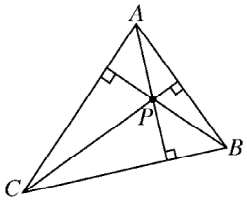
A.



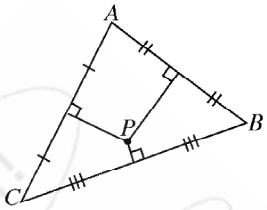
C.



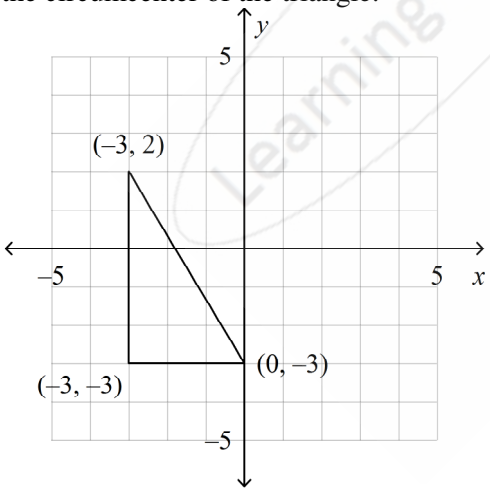
B.



D.



____ 2. Find the circumcenter of the triangle.

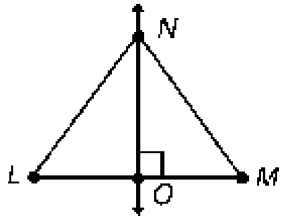


A. $(-3, -\frac{1}{2})$ B. $(-\frac{1}{2}, -\frac{3}{2})$ C. $(-\frac{3}{2}, -\frac{1}{2})$ D. $(-\frac{3}{2}, -3)$

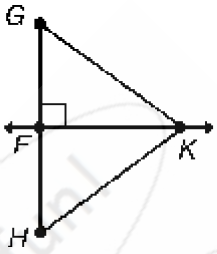
____ 3. Find the circumcenter of ΔEFG with $E(6, 4)$, $F(6, 2)$, and $G(10, 2)$.

A. (3, 8) B. (4, 2) C. (8, 3) D. (6, 4)

4. $\overleftrightarrow{NO}$ is the perpendicular bisector of $\overline{LM}$. If $OM = 7$ and $LN = 12$, then $LO =$_____ and $MN =$_____. Explain your solutions.



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



A. $\angle KHF$ B. $\overline{KF}$ C. $\angle FKG$ D. $\angle KFH$

Triangle Perpendicular Bisectors
Answer Section

1. D
2. C
3. C
4. $LO = 7$, $MN = 12$; $LO = OM$ by definition of bisector and $MN = LN$ by the Perpendicular Bisector Theorem.
5. A