

This homework is due Monday, March 29, 2021.

Problem 1. Let $A = (2, 4)$, $B = (4, 6)$, and $C = (8, 2)$.
Find the circumcenter of $\triangle ABC$.

Problem 2. Let $A = (2, 4)$, $B = (4, 6)$, and $C = (8, 2)$.
Find the equation of the circle through A , B , and C .

Problem 3. Let $A = (2, 4)$, $B = (4, 6)$, and $C = (8, 2)$. Find a point D such that $ABCD$ is a parallelogram.

Problem 4. Let $A = (2, 4)$, $B = (4, 6)$, and $C = (8, 2)$. Find the centroid of $\triangle ABC$.