8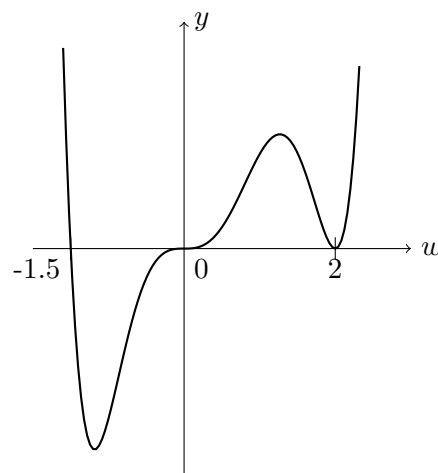. [5 points] Consider the polynomial: $G(x) = x^5 - 6x^3 + 9x$. Find the zero(s) of G. Your answer should be **exact**, and must be found *algebraically*. If there are no zeros, write NONE in the space provided:

Zero(s): _____

9. [5 points] Below is part of the graph of a polynomial $P(w)$. Assume that the point $(1,1.25)$ lies on the graph of $y = P(w)$ and $P(w)$ has **exactly** three distinct zeros. Find a possible formula for $P(w)$ so that it has the **smallest** degree possible. Show your work carefully.

$P(w) = $_____