> "*The place to improve the world is first in one's own heart and head and hands, and then work outward from there.*
>
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In class work 8 has questions 1 through 2 with a total of 8 points. This assignment is due at the end of the class period (9:55 AM). This assignment is printed on **both** sides of the paper.

1. For the polynomial $P(x) = \frac{1}{50}(x+4)(x-6)^2$, do the following:

2   (a) Find degree(P).

2   (b) Find the x-intercepts of the equation $y = P(x)$.

2   (c) At each x-intercept, determine if P is increasing or decreasing. To do this, follow the process we learned in class and fill out the chart. To help you start, I did one row for you.

Zero	$P(x) \approx$	increasing or decreasing
-4	$2(x+4)$	increasing

2   (d) Draw a PGG (pretty good graph) of P

2. Shown below is a graph of a polynomial W. Several points on the graph are labeled. (The point labeled $(0.5, 2.531)$ is actually the point $(0.5, 2.53125)$.) Given that the degree$(W) = 4$, find a formula for W.