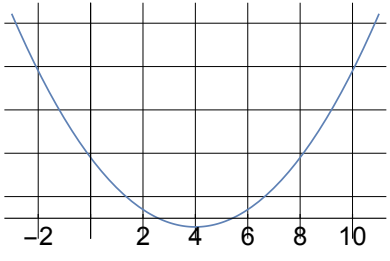
1. Find all critical values of $f(x) = x^3 + 3x^2 - 9x - 4$, and then use the First Derivative Test to classify each as a local max, local min, or neither.

2. The graph of $y = h(x)$ is shown below. If $f(x) = h(x^2)$, find the intervals where $f(x)$ is increasing and decreasing.



Graph of $y = h(x)$