

Name:

ID:

Instructions: Show your work clearly. Good luck.

Problem 1. (5 points) The sum of the absolute maximum and absolute minimum values of

$$y = \cos^2 x - \cos x$$

on $[-\frac{\pi}{2}, \pi]$, is

Problem 2. (5 points) If $f(3) = 2$, $f'(x) \geq 3$ for $2 \leq x \leq 3$, then the largest possible value of $f(2)$ is