Name:

[1 pt]

**Problem 1.** Find f satisfying the conditions:  $f''(\theta) = \sin \theta + \cos \theta$ , f(0) = 3, f'(0) = 4.

[5 pts]

**Problem 2.** Give an expression of the area under the graph of  $f(x) = \sqrt{\sin x}$ ,  $0 \le x \le \pi$ , as a limit [5 pts] of a sum. Do not evaluate the limit.