## $QUIZ\sharp 3$ Math 102-sec 15.

Net Time Allowed: 20 minutes

Name: ID  $\sharp$ : Serial  $\sharp$ :

## Exercise1:

Given that  $\sinh x = -\frac{3}{4}$ . Find the value of  $\operatorname{sech} x$ .

## Exercise2:

Let  $\overline{f(x)}$  be a function such that f' and f'' are continuous on  $[0, \pi]$ . Given that

$$f(0) = 1$$
,  $f(\pi) = -1$  and  $\int_0^{\pi} f(x) \sin x \, dx = 3$ .

Evaluate  $\int_0^{\pi} f''(x) \sin x \, dx$