## MATH 2300- Quiz 2

Instructions: You may not use your calculator, book, or notes. You may not work with anyone else on the quiz. You are encouraged to ask me a question if you are confused about something.

1. Compute the following indefinite integral:

$$
\int t \sin (t) d t
$$

2. Compute the following indefinite integral:

$$
\int_{1}^{2} y \ln (y) d y
$$

Do one of the following two problems:
3. Compute the following indefinite integral:

$$
\int(\ln (y))^{2} d y
$$

Hint: Write $(\ln (y))^{2}=1 \cdot(\ln (y))^{2}$
4. Compute the following definite integral:

$$
\int_{\pi}^{\frac{3 \pi}{2}}(\sin (t))^{2} d y
$$

Hint: I did a similar example in class last week

