## NAME

MATH 133 - Michigan State University
October 3rd, 2017.

## Quiz 5

Clear your desk of everything except pens, pencils and erasers. Show all your work.
If you have a question raise your hand and I will come to you.

1. [3.5 points] Find the integral:
$\int x \ln (3 x) d x$
2. [3.5 points] Find the integral below. Recall that $\frac{d}{d x}(\arctan (x))=\frac{1}{1+x^{2}}$.

$$
\int \arctan (2 x) d x
$$

3. [3 points] Find the integral:

$$
\int \frac{1}{x^{2} \sqrt{x^{2}-25}} d x
$$

