## Math 132 - Homework 3

 March 3, 2021Name $\qquad$
Score $\qquad$

The following problems are from the suggested homework. Show all work to receive full credit. Supply explanations when necessary. This assignment is due on March 10.

1. (2 points) Integrate: $\int x^{2} \sin \left(3 x^{3}+2\right) d x$
2. (2 points) Determine the exact value of $\int_{0}^{\pi / 2} x^{2} \sin x d x$
3. (2 points) Integrate: $\int \tan ^{5}(2 x) \sec ^{2}(2 x) d x$
4. (2 points) Integrate: $\int \sin ^{3} x d x$
5. (2 points) Integrate: $\int \sqrt{x^{2}+9} d x$
