Exam 2 Version A **Name**_____

Math 132-01 **Calculus II** **February 28, 2018**

Guidelines

- **Calculators are not allowed.**
- Read the questions carefully. You have 65 minutes; use your time wisely.
- You may leave your answers in symbolic form, like $\sqrt{3}$ or $\ln(2)$, unless they simplify further like $\sqrt{9} = 3$ or $\cos(3\pi/4) = -\sqrt{2}/2$.
- **Put a box around your final answers when relevant.**
- Show all steps in your solutions and make your reasoning clear. Answers with no explanation will not receive full credit, even when correct.
- Use the space provided. If necessary, write "see other side" and continue working on the back of the same page.

Question	Points	Score
1	8	
2	8	
3	8	
4	10	
5	10	
6	12	
7	12	
8	10	
9	10	
10	12	
Total:	100	

1. (8 points) On a separate sheet of paper, correct any problem where points were deducted. Take the test corrections and the exam to the OSL and have a tutor check and sign your corrections. Return your test corrections to your instructor.

2. (8 points) Evaluate $\int \frac{x^2 - 11}{x + 3}$

3. (8 points) Evaluate $\int \frac{1}{x^2 + 2x + 5}\, dx$

4. (10 points) Evaluate $\int \arctan x \, dx$.

5. (10 points) Evaluate $\int \frac{\sin^3 x}{\cos^6 x}\, dx.$

6. (12 points) Evaluate $\int \frac{x^4}{(x^2+4)^{9/2}}\, dx$

7. (12 points) Evaluate $\int x^2 \cosh x \, dx$.

8. (10 points) Find the general solution of $x^2 \frac{dw}{dx} = \sqrt{w}(3x + 1)$

9. (10 points) Evaluate the following integral, if it exists.

$$\int_1^\infty \frac{2x+3}{(2x^2+6x)^2}$$

10. (12 points) Evaluate $\int \frac{8-x}{x^3+4x}\,dx$