Homework 2   **Due January 22, 2026**
Calculus II   **Prof. Nollet**

Review Assignment:
Section 5.6 # 28, 39, 50, 53, 59, 62, 68, 71, 77, 82

Hints:
#28 u-endpoints are negative, so important to remember absolute value in the integral
#39 $u = e^x$, what are the u endpoints?
50 Use u-substitution for the integral
#53 To integrate, use the identify $\cos^2 x = \frac{1+\cos 2x}{2}$
#59 If you integrate with variable y, you will only need one integral.
#62 Get signs right for the crossing at $x = 0$.
#68 Find endpoints first
#71 You will find THREE regions, but symmetry helps. Algebra is grungy (feel free to use calculator on HW), but answer is nice.
#77 Find the y-endpoints using $y^2 - 4 = 4x = 16 + y$.
#82 There are two regions.