

Reading for February 20: Boas Chapter 8 Sections 5-6

- (1) Boas pg 404 problem 20
- (2) Boas pg 407 problem 17. Check if the equation is exact and then solve.
- (3) Describe the ODE and find the specific solution for the initial value problem

$$(2 + x^2u) \frac{du}{dx} + xu^2 = 0, \text{ if } u(1) = 2.$$

- (4) Obtain the general solution of the ODE $u' - u = \cos x$.