

**Dartmouth College**  
Mathematics 23 - Assignment 5

1. For each of the following, indicate whether the equation is separable, whether it is linear, and whether it is exact. You do *not* have to solve the equation.

(a)  $(y + 1) + xy' = 0$

(b)  $y \sin(x) - \cos(x)y' = 5.$

2. Boyce and DiPrima, Section 2.6: 10
3. Boyce and DiPrima, Section 2.6: 14
4. Boyce and DiPrima, Section 2.6: 20
5. Boyce and DiPrima, Section 2.6: 23
6. Boyce and DiPrima, Section 2.6: 27 (You may want to use problem 23.)