All Names:

Group nr: \_\_\_

Worksheet 06/26

MAP 2302 - Summer B 2019

- 1. Problem 9, section 3.2, textbook.
- 2. Again identify (as a group now) the types of the 1st order ODEs on Quiz 1 (see below), and then solve the linear one and the homogeneous one.

(a) 
$$x dy + (x^2y + 2y - 3) dy = 0$$

(b) 
$$x^2(y^2+1) dx + y(x^3+1) dy = 0$$

(c) 
$$(\sin x + \sin y) dx + (y + x \cos y) dy = 0$$

(d) 
$$\frac{dy}{dx} + 4xy = \frac{x}{y^2}$$

(e) 
$$y dx = (4x+2y) dy$$