Math 454, HW1

(1) Write the given high order equations as sets of first order equations
   (a) $y'' + 2y' + xy = 0$;
   (b) $x^2 y'' - 5xy' + 9y = 0$;
   (c) $y''' - 2xy'' + 2y + 5 = 0$.

(2) (page 36) 2.2.1; 2.2.2; 2.2.3; 2.2.4

(3) (page 41) 2.4.1; 2.4.2; 2.4.4; 2.4.7