

June 24, 2015
Math 201, Tutorial 6

1) Solve the following differential equations.

a)

$$y'' + y = \sec x$$

What method must be used to solve for the particular solution and why?

b)

$$x^2 y'' + 4xy' + 2y = 0$$

2) Find a two parameter family of solutions to the given differential equation using the substitution $u = y'$. Don't worry about an interval.

$$x^2 y'' + (y')^2 = 0$$