

Math 45, Fall 2020  
November 4, Quiz 09

Name: \_\_\_\_\_

Please show and explain your work where necessary. Good luck!! You may use the formulas

$$u'_1 = -\frac{y_2 f(x)}{W} \quad \text{and} \quad u'_2 = \frac{y_1 f(x)}{W}$$

if you so desire.

**1.** (10 points) Use the method of variation of parameters to solve the differential equation  $y'' + y = \sec(x)$ .