

**Quiz 8;** Tuesday, November 1  
**MATH 54** with Ming Gu  
**GSI:** Eric Hallman

**Student name:**

You have 15 minutes to complete the quiz. Calculators are not permitted.

1. (12 points) Find a solution of the form  $y = A \cos 3t + B \sin 3t$  to the differential equation

$$y'' + 2y' + 4y = 5 \sin 3t.$$