Quizzes MATH 202 Sections 03 and 05

Quiz #1:

Solve the DE

$$z' + (\tan t)z^2 = 0.$$

Quiz #2:

Find a second solution linearly independent from $y_1(x) = e^x$ for the DE

$$y'' + y' - 2y = 0.$$

Quiz #3:

Find THE annihilator of

$$e^{5x}\cos^2 x + x^3\cosh 2x.$$

Quiz #4:

Solve

$$y'' - 2x^3y' + xy = 0, \ y(0) = 1, \ y'(0) = -2.$$

Quiz #5:

Solve nearby 1

$$(x-1)y'' + xy' + y = 0$$