

MATH 202.7 (Term 141)

Quiz 3 (Sects. 4.2 & 4.3)

Duration: 20min

Name:

ID number:

1.) (5pts) Use reduction of order to find a second solution y_2 of the DE
 $(1 - x^2)y'' - 2xy' + 2y = 0$, $x > 1$, given that $y_1 = x$ is a solution of the DE.

2.) (5pts) Solve the IVP $\begin{cases} y^{(4)} + y'' - 2y = 0 \\ y(0) = y'(0) = 0, y''(0) = y^{(3)}(0) = 1. \end{cases}$
