## MATH 202.11 (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  $xy''-y'+4x^3y=0$ , given that  $y_1=\sin(x^2)$  is a solution of the DE.
2.)(5pts)Solve the IVP  $\begin{cases} y^{(4)}-y=0\\ y(0)=y'(0)=0,\ y''(0)=y^{(3)}=1. \end{cases}$