

MATH 202.11 (Term 141)

Quiz 1 (Sects. 1.2, 2.2 & 2.3)

Duration: 20mn

Name:

ID number:

1.) (3pts) Do the following IVP have unique solutions?

a.) $\begin{cases} y' = \frac{\sqrt{y-1}}{x} \\ y(0) = 1, \end{cases}$ b.) $\begin{cases} y' = x^2 y^3 \\ y(1) = 1. \end{cases}$

2.) (4pts) Solve the DE: $y^2 dy = \cos 2x (y^2 - 3y + 2) dx$.

3.) (3pts) Solve the DE: $x dy = (y + x^4 + x^2) dx$.
