

ME203 PROBLEM SET #1

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<http://www.mhml.uwaterloo.ca/courses/me203/>

1. Text - Section 1.1
 - Problems 5, 7, 9 (classification of solutions)
 - Problem 15 (derivation of equations)
2. Text - Section 1.2
 - Problems 3, 8, 15, 21 (solutions to ODEs)
3. For the differential equation $t^2 \ddot{y} - 4t\dot{y} + 4y = 0$ find the value(s) of the power r such that $y = t^r$ satisfies the equation.
4. Text - Section 1.3
 - Problems 3, 5 (Direction fields)