

Marble Descent Project Grading Notes

This project will be graded out of a total 50 points, with 25 points for the mathematical analysis and 25 communication points. (See the document *M442 as an Oral Communications (C) Course*, available on the course web site, for more information about the communication grade.) Each project can be resubmitted once to be re-graded on communication.

Student Name

Analysis points

1. **10 points.** Dimensional analysis, including the identification of appropriate variables, calculation of dimensionless products, and general relationship among the dimensionless products.
2. **10 points.** Regression analysis, including the calculation of dimensionless data, identification of a general form for the function φ , and estimation of the parameters in φ .
3. **5 points.** Plot of experimental and model values of v , and calculation of E and s .

Communication points

1. **10 points.** Clarity of discussion, including a thorough introduction, systematic development of the analysis with no sizeable omissions (such as leaving out an important M-file), and thorough conclusion.
2. **5 points.** Typesetting of the mathematics, including the appearance of variables both in the prose and in displayed equations and the appearance of mathematical structures such as (properly aligned) systems of equations, matrices or summations.
3. **5 points.** Figures, tables and files, including layout and appropriate sizing (inside text columns, but not too small).
4. **5 points.** Grammar and typographical issues, including sentence fragments and illogical sentence constructions, misspelled words, and subject-verb agreement.