

Please answer all questions in the homework format listed on the website.

- 1) Dowling, Problem 7.11. Find safety factor for Tresca failure criterion only.
- 2) Dowling, Problem 7.31. Do part (a) only. Use Table 4.2. Find the diameter that is appropriate for von Mises failure criterion. Hint: Eq. 7.36 is much easier to work with for this problem.
- 3) Dowling, Problem 7.35. You will need to review stress concentrators in Appendix A.6. Assume cast gray iron is a brittle material

Suggested Problems:

- 1) Dowling, Problems 7.3, 7.19, 7.21-23, 7.25, 7.27, 7.29, 7.36