

Homework 11 - Math 141, Frank Thorne (thornef@mailbox.sc.edu)

Due Friday, December 2

Important. For all volume problems, please sketch the solid whose volume you are computing, and draw and label a typical slice.

- (a) Find the volume of a sphere with radius r .
- (b) Find the volume of a hollowed out sphere of radius r , with a smaller sphere of radius s removed from the center. (Hint: there is an easy way!)
- (c) Find the volume of a circular cone of radius r and height h .
- (d) Find the area of a square pyramid with base length b and height b .
- (e) Thomas, Ch. 5.6, 5-12, 47-54 (even required, odd recommended).
- (f) Thomas, Ch. 6.1, 15-20, 37-40 (even required, odd recommended).