

Homework 13 - Math 141, Frank Thorne (thornef@mailbox.sc.edu)

Due Friday, December 7

- (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 .

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

- (e) Stewart, Ch. 6.2, 1-10 (even).
- (f) Stewart, Ch. 6.2, 41, 42, 51, 68, 70.

Additional problems:

- (a) Stewart, Ch. 6.2, 1-10 (odd).

Bonus: 6.2, 51, 66 (1 point each).

That's it!