

Math 2250 HW #13

Due 1:25 PM Friday, November 11

Reading: Hass §4.7–4.8

Problems: Do the assignment “HW13” on WebWork. In addition, write up solutions to the following problems and hand in your solutions in class on Friday.

1. Find the volume of the largest right circular cone that can be inscribed in a sphere of radius 3. An illustration is given on p. 261, problem #12. Remember that the volume of a circular cone with radius r and height h is $\frac{1}{3}\pi r^2 h$. (*Hint: which variable you choose to express the volume in terms of makes a big difference in how easy it is to differentiate*)
2. Problem #24 from p. 262 of the textbook.