

Math 2250 HW #5

Due 1:25 PM Friday, September 16

Reading: Hass §3.1–3.3 (these are §2.7, 3.1–3.2 in the first edition)

Problems: Do the assignment “HW5” on WebWork. In addition, write up solutions to the following two problems and hand in your solutions in class on Friday.

1. What is the rate of change of the volume of a ball (remember that the volume of a ball of radius r is given by $\frac{4}{3}\pi r^3$) with respect to the radius when the radius is $r = 2$?
2. Show that the line $y = mx + b$ is its own tangent line at any point (x_0, y_0) on the line.