

Part I (due at the beginning of class Monday, October 6)

Finish anything on The Derivative Is a Function! handout that you didn't get to in class. We will discuss this in class Monday, but you won't have to turn anything in. Bring your questions to ask, though!

Part II: WeBWorK (due Saturday, October 11, by 11 PM)

[Click here](#) for your WeBWorK assignment. Complete the DW 14 WeBWorK assignment.

Part III: Homework Problems (due Friday, October 10 at the beginning of class)

1. If $f(x) = 4x^3 + 18x^2 - 48x - 24$, find the x -coordinates of all the places where the tangent line to $f(x)$ is horizontal.
2. If $f(x) = x^2$, find the coordinates of the intersection point of the line tangent to $f(x)$ at $x = 3$ and the line tangent to $f(x)$ at $x = -8$.
3. Given the graph of a function $f(x)$ below, sketch the graph of its derivative on the same set of axes.

