MATH 133 – Calculus with Fundamentals 1
Discussion Day – "Derivative Practice"
October 30, 2017

Questions

Differentiate each of these with respect to the indicated variable. Note: you will want to think first about which rule(s) you need to apply, and then apply them. *Don't worry too much about simplifying your answers – any correct form is OK for this.*

(1) $f(x) = x^{5/6} + 3\sqrt[4]{x} + 3e^x$

(2) $f(x) = (x^2 + e^x)\sqrt{x}$

(3) $f(x) = \dfrac{x + 2}{x + 7}$

(4) $f(x) = \dfrac{x^2 + e^x}{\sqrt{x}}$

(5) $g(t) = e^t \left(1 + \dfrac{t^2}{1 + t^2} \right)$

(6) $h(z) = \dfrac{3}{z^{2/3}} - z(e^z + 4z)$

Assignment

One writeup of solutions to these problems from each group, due at the end of class.