Math 104 90A[1] October 20th, 1999. Worksheet 9

http://www.math.ubc.ca/~ athreya/104

---

1. Find the derivative of the following functions:

   (a) $y = \tan x$.

   (b) $y = \sec x$.

   (c) $y = \arctan x$, where x is any real number and $-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}$.

   (d) $y = \cos(\sqrt{x})$.

   (e) $y = \sin^2(3x)\cos^4(5x)$.

2. If $y = 2\sin 10t + 3\cos \pi t$, then find $\frac{dy}{dt}$.

[1] **Office hours:** Monday: 1:45-3:15pm, Tuesday:3:30-5:30pm, Wednesday 2:15-3:15pm