Homework 2

Name: Date: May 21, 2013

P 1. Find solutions to

$$\tan x = 1$$

on the interval (a) $[0, 2\pi)$ (b) $[-10\pi, -9\pi]$ (c) $[0, \infty)$ (d) $[-2\pi, 2\pi]$.

P 2. Find solutions to

$$1 + 2\sin(2x + 3) = 0$$

on the interval (a) $(-\infty, -2\pi]$ (b) $[0, 2\pi]$ (c) $(4\pi, 17\pi/4)$.

P 3. Graph

$$y = \frac{1}{2}\sec\left(\frac{\pi x}{2} + \frac{\pi}{2}\right).$$

Include two full periods. Label x and y-intercepts (if any).

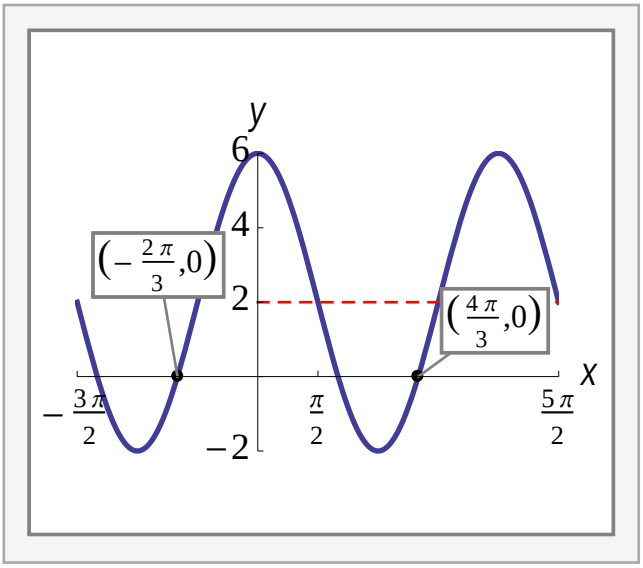
P 4. Graph

$$y = \tan\left(x - \frac{\pi}{4}\right) - 1$$

Include two full periods. Label x and y-intercepts (if any).

P 5. Define a function f such that the graph of f matches the figure.

(a)



(b)