

## HW6 Answers

**p.420 #6,10.** Answers on the book

**p.431 #19.** Weierstrass M-test shows the uniform convergence of the series. Continuity of  $f$  follows from the uniform convergence. The integral identity follows from term-by-term integration.

**p.431 #20.** Part (a) follows from evaluating at  $x = 0$ . Part (b) follows from integrating both sides of the identity on the interval  $[0, \pi/2]$ .

**p.438 #1,2,3.** Answers on the book