Homework #1
Due F. 1/27

(OW = Oppenheim, Willsky, and Nawab, “Signals and Systems”).

Note: The Basic Problems with Answers will be worth half as much as the other questions. You must show all your work to receive credit.

1. (OW 1.21)
2. (OW 1.22 (a)-(f))
3. (OW 1.31)
4. (OW 1.49 (a)-(g), (i), (k), (l))
5. (OW 1.51)
6. (OW 1.55 (a)-(e))
   You will probably want to complete the last problem before attempting this one.
7. (OW 1.56 (b)-(f))
8. Using expressions in OW 1.54 and for any $0 < N_1, N_2 < \infty$,
   (a) For $a \neq 1$, find a closed form expression for
   \[ \sum_{n=N_1}^{N_2} a^n \]
   (b) For $|a| < 1$, find a closed form expression for
   \[ \sum_{n=N_1}^{\infty} a^n. \]