Homework #1Due Th. 1/28

- 1. (OW 1.21)
- 2. (OW 1.22 (a)-(f))
- 3. (OW 1.31)
- 4. (OW 1.49 (a)-(f), (i), (k), (l))
- 5. (OW 1.51 (a)-(c))
- 6. (OW 1.55)
- 7. (OW 1.56)
- 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

$$\sum_{n=N_1}^{\infty} a^n.$$