## Assignment 5

Due: 10/30/2017

- (1) Calculate the following:
- (a) 4!
- (b) 5!
- (c)  $\frac{5!}{4!}$
- (d)  $\frac{100!}{99!}$
- (e)  $\frac{48!}{50!}$
- (2) Completely simplify the following (your final answer should not have any factorials in it; only multiplication and/or division).
- (a)  $\frac{n!}{(n-1)!}$
- (b)  $\frac{(n-2)!}{n!}$

Ch. 16 (Pg. 508) - #'s: 1(c), 2(a), 2(b), 4(a), 17, 18, 26, 28, 29.

**Note:** The directions for #28 and #29 state you do **not** have to get an actual numerical answer. Just leave your answer in nPr or nCr notation.