

Math 671 - Assignment 10 - Due Nov. 25

1. Text E16.2 (Turn this in)
2. Text E16.1 (Don't turn this in, but compare to E16.2)
3. (a) E16.4. (b) Do this again without a contour integral. (Hint: clever integration by parts.) Turn in at least one of these, a or b.
4. E18.1a (Don't turn this in...yet.)
5. Find the moment-generating function for a *Bernoulli*(p) random variable X . (In other words, $P(X = 1) = p, P(X = 0) = q = 1 - p$.) Use this to find the MGF of a *Binomial*(n, p) random variable Y . Use that MGF to find the mean and variance of Y . (Turn this in.)