

Homework 8

Due Friday, March 21 in class

Lecture 21 (Friday, March 7)

NO HOMEWORK! Enjoy your spring break!!!

Lecture 22 (Monday, March 17)

Do exercises 3.102, 3.107, 3.115 and 3.116.

And

1. Differentiate $f(x) = (4x + x^{-5})^{1/3}$;
2. Differentiate $f(x) = \cos^2(x^3)$;
3. Integrate $\int x \ln x dx$;
4. Integrate $\int x^2 e^{3x} dx$.

Lecture 23 (Wednesday, March 19)

Do exercises 3.121, 3.123, 3.131 and 3.134.

Note: The relationship between moment generating function and probability distribution is one-to-one, that is, if I tell you that the moment generating function for a r.v. X is

$$m(t) = e^{5(e^t - 1)} \tag{1}$$

then it means that the probability distribution of X is Poisson(5).

That's all for homework 8.