

Homework Set 3

DUE: FEB 7 - 9, 2018 (AT THE BEGINNING OF RECITATION)

1. Evaluate the following indefinite integrals:

a) $\int (x^3 - 2x^2)e^x dx$

b) $\int \cos 2z \cos 5z dz$

c) $\int x \cos^2 x dx$

d) $\int xe^{3x} dx$

e) $\int \sec^3 x dx$

f) $\int e^{-2y} \sin 4y dy$

g) $\int \cos^3 x \sin^3 x dx$

h) $\int \sqrt{x}e^{\sqrt{x}} dx$

i) $\int \sin^2 \theta \cos \theta d\theta$

j) $\int \sqrt{1 - \cos 2w} dw$

k) $\int \frac{1}{x \ln x} dx$

l) $\int \frac{1}{x(\ln x)^2} dx$