

Due date: _____

Name: _____

1. Evaluate the following integrals.

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

b) $\int (x^2 + 3x + 1) \cos 3x dx$

c) $\int (x^2 + 3) \sinh x dx$

d) $\int x \csc^2 x \, dx$ (Hint: First use integration by parts, then substitution.)

e) $\int x^2 \ln x \, dx$

f) $\int \ln \sqrt{x} \, dx$

g) $\int e^{2x} \sin x \, dx$

h) $\int 3e^{-x} \cos 2x \, dx$

i) $\int \sin^{-1} x \, dx$

j) $\int \tan^{-1} x \, dx$

k) $\int x\sqrt{x+2} \, dx$

Q: What starts with "P" and ends with "E" and has more than 1000 letters?

Optional exercises from the Stewart textbook if you'd like more practice:
7.1 (p.476) #1-21 odd