Due date: _____ **Name:** _____

1. Evaluate the following integrals.

   a) $\int \cos x \sqrt{1 + \sin x}\, dx$

   b) $\int e^{2\cos x} \cdot \sin x\, dx$

   c) $\int 3xe^{x^2+2}\, dx$

d) $\int \frac{\sec x \tan x}{1+\sec^2 x}\, dx$

e) $\int \sqrt{-2x+3}\, dx$

f) $\int \frac{2}{3-5x}\, dx$

g) $\int \frac{2}{x(\ln x)^3}\,dx$

h) $\int \frac{\log_2 x}{x}\,dx$

i) $\int \frac{2\sin x \cos x}{1+\cos^2 x}\,dx$

j) $\int \frac{dx}{(\tan^{-1} x)^2(1+x^2)}$

k) $\int \tan x \, dx$

l) $\int \cot x \, dx$

m) $\int (2x^2 + 1)(2x^3 + 3x + 3)^5 \, dx$

n) $\int \frac{3x^3+6}{(x^4+8x)^5} \, dx$

o) $\int x\sqrt{1 - x^2} \, dx$

p) $\int x\sqrt{1-x}\,dx$

q) $\int \frac{x+1}{x^2+1}\,dx$

Q: Which eight-letter word still remains a word after removing each letter from it?

Optional exercises from the Stewart textbook if you'd like more practice:
5.5 (p.418) #1-47 odd