

Name: _____

Calculus Practice Quiz #8

This quiz is to determine if you have mastered the material by attending tutoring sessions and completing your homework. Please write legibly and show as much work as possible for each problem.

1. Evaluate each definite or indefinite integral.

a. $\int \frac{2x-3}{x^2+4} dx$

b. $\int_1^3 \frac{dx}{\sqrt{4x-x^2}}$

c. $\int_{-4/3}^{-2\sqrt{2}/3} \frac{dx}{x\sqrt{9x^2-4}}$

d. $\int \frac{e^{-x} \arccos(e^{-x})}{\sqrt{1-e^{-2x}}} dx$

e. $\int \frac{dx}{x^2+14x+53}$

f. $\int_{\pi/6}^{\pi/3} \frac{1+\sin x}{1+\cos x} dx$

g. $\int (e^x + e^{-x})^2 dx$

h. $\int (\sec^2 4x)(\ln \tan 4x) dx$

i. $\int x \cos(x+2) dx$

j. $\int 2x \arctan(3x^2) dx$