In Section 3.8, read from the beginning of the section to the end of Example 5 (but only read about the inverse sine and inverse tangent—IGNORE the inverse cosine, inverse cotangent, inverse secant, and inverse cosecant).

Do the following problems:

p. 230 # 13, 14, 58, 62, 69

Then evaluate the following integrals.

A) $\displaystyle\int \frac{dx}{\sqrt{1-4x^2}}$

B) $\displaystyle\int \frac{dx}{1+9x^2}$

C) $\displaystyle\int \frac{x}{1+x^4}\,dx$

D) $\displaystyle\int \frac{e^x}{\sqrt{1-e^{2x}}}\,dx$

E) $\displaystyle\int \frac{e^x}{\sqrt{1-e^x}}\,dx$