

Assignment 7 (1/26)

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Use calculator wherever necessary.

Problem 1

Problems 5.7.(1, 25, 35, 38, 64, 82, 84).

Problem 2

Find

$$\int \frac{dx}{(x + \sqrt{1+x^2})^2}.$$

Problem (Bonus)

You do not have to submit solution to this problem; however solving this and submitting the answer will earn you a candy/chocolate! (which you will need to remind me about!)

Evaluate

$$\int_{\sqrt{\frac{3a^2+b^2}{4}}}^{\sqrt{\frac{a^2+b^2}{4}}} \frac{x}{\sqrt{(x^2-a^2)(b^2-x^2)}} dx$$