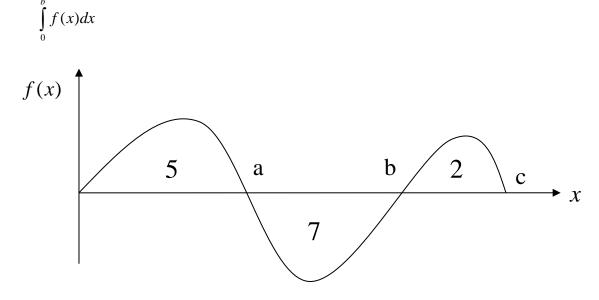
Conceptual Questions Chapter Integration



1) Given the f(x) vs x curve, and the magnitude of the areas as shown, the value of



Individual Attempt	Group Attempt
A7	A7
B2	B2
C. 12	C. 12
D. Cannot be determined	D. Cannot be determined

Justification/ Work _____

Conceptual Questions Chapter Integration

Last Name	First Name	Date	Group#	Last Name Initial
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Chapter 07.02 (Set One)

- 1. What is the approximate value of $\int_{a}^{b} xe^{x} dx$ where a = 1.1 and b = 4.3 using three-segment trapezoidal rule?
- 2. What is the value of the integral $\int_0^{2.4} f(x) dx$ if $f(x) = 2.4x, 0 \le x \le 0.22$ and

$$= 3.2x^2, 0 \le x \le 2.4,$$

using the two-segment trapezoidal rule?

3. Using the multiple-segment trapezoidal rule with 25 segments, the true error in estimating an integral $\int_{10}^{20} f(x) dx$ is found to be 2.6. If a multiple segment trapezoidal rule with 56 segments is used for the same integral, what is your approximate estimate of the true error?