

Name _____

Homework 5
Section 7.5

1. (3ea) Sketch a graph for each of the following descriptions. [While you don't have to produce a work of art, please make an effort to draw neatly and clearly convey what you are trying to.]

(a) $f(x)$ is a function for which, on the interval $[-1, 7]$, $\text{LEFT}(8) < \int_{-1}^7 f(x) dx < \text{RIGHT}(8)$
and $\text{TRAP}(4) < \int_{-1}^7 f(x) dx < \text{MID}(4)$.

(b) $f(x)$ is a function for which, on the interval $[1, 5]$, $\text{LEFT}(3) > \text{RIGHT}(3)$, and
 $\text{TRAP}(3) = \text{MID}(3) = \int_1^5 f(x) dx$.

2. (3ea) Use numerical integration methods with the appropriate number of subintervals to approximate $\int_1^{13} f(x) dx$ for the function whose values are given in the table below.

x	1	3	5	7	9	11	13
$f(x)$	2.5	1.1	0.5	1.4	3.5	10.6	20.5

List your answers here, and show your work below (and on an additional page if necessary).

LEFT(6)=_____ MID(3)=_____ TRAP(3)=_____

RIGHT(6)=_____ TRAP(6)=_____
