Using Riemann Sums: HW Quiz A Name_____

1. Use the data below and 4 sub-intervals to approximate the area under the curve using Left Riemann Sums.

t(hours)	0	2	5	7	8
E(t) (hundreds of entries)	0	4	13	21	23

2. Let f be a function that is twice differentiable for all real numbers. The table gives values of f for selected points in the closed interval $2 \le x \le 13$.

x	2	3	5	8	13
f(x)	1	4	-2	3	6

Use a Right Riemann sum with 4 subintervals indicated by the data in the table to approximate $\int_2^{13} f(x)dx$. Show the work that leads to your answer.

3. Use the data below and 2 sub-intervals to approximate the area under the curve using Midpoint Riemann Sums.

t	0	2	4	6	8
H(t)	66	60	52	44	43

4. Use the data below to approximate the area under the curve using the Trapezoid Rule with 4 sub-intervals,

T	0	1	5	6	8
P(t)	100	93	70	62	55

Using Riemann Sums: HW Quiz B Name_____

1. Use the data below to approximate the area under the curve using Left Riemann Sums.

and 4 sub-intervals.

T	0	2	5	7	11
P(t)	5.7	4	2	1.2	.6

2. Use a Right Riemann sum with 4 subintervals indicated by the data in the table to approximate $\int_0^{12} f(x)dx$. Show the work that leads to your answer.

T	0	3	6	9	12
W(t)	20	31	28	24	22

3. Use the data below to approximate the area under the curve using the Trapezoid Rule with 4 sub-intervals.

T	0	30	40	50	70
R(t)	20	30	40	55	65

4. Use the data below to approximate the area under the curve using a Midpoint Riemann Sums with 2 sub-intervals

t	0	4	8	12	16
V(t)	7	9.2	9.5	7	4.5