

MATH 140: Quiz 5

Name:

#1. (8 points) Approximate  $\int_0^{10} f(x)dx$  given the following data:

$x$	0	2	4	6	8	10
$f(x)$	1	7	2	8	3	9

#2. (7 points) Google obtains advertisement revenue at a rate given by

$$R(s) = \frac{100000 + 1540t - t^2}{1000 + t} \text{ (dollars/minute)}$$

where  $t$  is the number of minutes past midnight. Find the total revenue obtained between 9AM and 5PM.  
*(Hint: 9AM is 540 minutes past midnight, and 5PM is 1020 minutes past midnight.)* If you use your calculator, make sure you still explain what you had it compute.

#3. (5 points) Given the following graphical information, determine  $\int_0^{40} f(t)dt$ .

