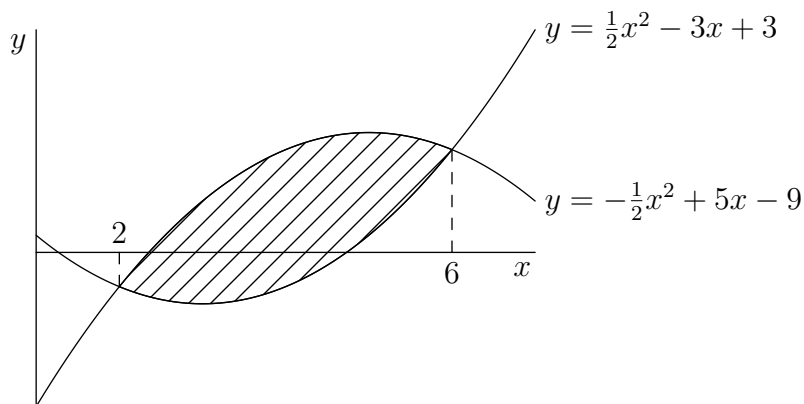MTH 124.019 Quiz 6
Friday 19 March 2010

Name:
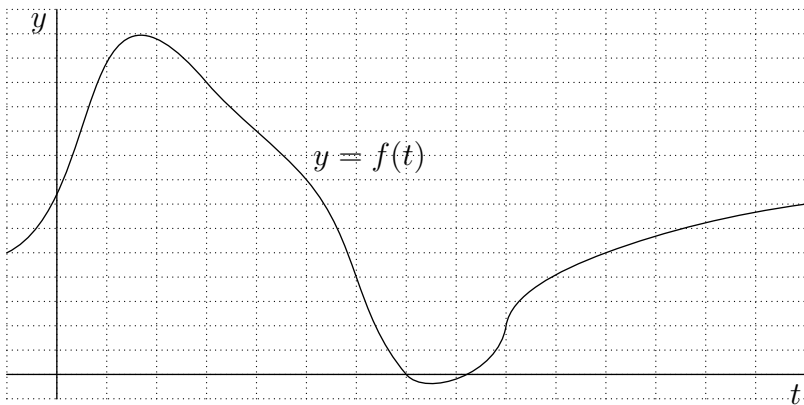
Show *all* your work. Points will be deducted for incomplete work. Write your answer in the box provided

1. Consider the following graph.

$y = \frac{1}{2}x^2 - 3x + 3$

$y = -\frac{1}{2}x^2 + 5x - 9$

Write a single integral which represents the shaded area. The expression inside the integral sign should be simplified algebraically.

2. The following is the graph of $f(t)$. The gridlines are 1 unit apart.

$y = f(t)$

(a) Compute the *right hand Riemann sum* of $f(t)$, with $n = 4$, from $t = 3$ to $t = 11$.

(b) On the graph, draw the rectangles whose areas you computed for part (a).