

PRINT Your Name: _____

Quiz 4 — September 23, 2012 — Section 2 — 4:40 — 5:30

Remove everything from your desk except this page and a pencil or pen.

The solution will be posted soon after the quiz is given.

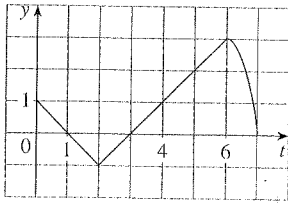
The quiz is worth 5 points.

Let $g(x) = \int_0^x f(t)dt$, where f is the function whose graph is shown.

(a) Find $g(1)$.

(b) Find $g(5)$.

(c) Where does g have a minimum value?



(a) $g(1) = \text{area of } \triangle = \boxed{\frac{1}{2}}$

(b) $g(5) = \text{area of } \triangle - \text{area of } \triangle + \text{area of } \triangle$
 $= \frac{1}{2} - 1 + 2 = 2 - \frac{1}{2} = \boxed{\frac{3}{2}}$

(c) $g(3)$ is the minimum value of g

g is increasing on $[0, 1]$

g is decreasing on $[1, 3]$

g is increasing on $[3, 7]$