Mid Ch 5 Practice Key

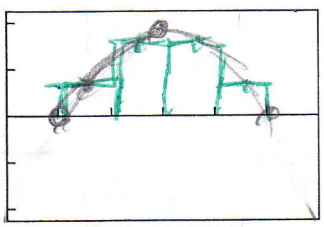
(1) $5(6) + 5(12) + 5(18) + 5(26) + 5(24) + 5(22)$

30
60
90
130
120
110
540

540 ft D

(2) $y = -\frac{1}{2}x^2 + 3x - \frac{5}{2}$ on $[1, 5]$

2.



[0, 6] by [−2.25, 2.25]

~~$1/2(1)$~~ + 65 ... you can use a calculator

(3) $x = \frac{-3}{2(-\frac{1}{2})} = 3$ $\quad f(3) = -\frac{1}{2}(9) + 9 - \frac{5}{2}$

$\frac{9}{2} - \frac{5}{2} = \frac{4}{2} = 2$

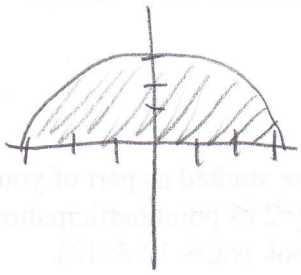
$(3, 2)$

x	$f(x)$	$x f(x)$
$\frac{3}{2}$	$\frac{7}{8}$	$\frac{21}{16}$
$\frac{5}{2}$	$\frac{15}{8}$	$\frac{75}{16}$
$\frac{7}{2}$	$\frac{15}{8}$	$\frac{105}{16}$
$\frac{9}{2}$	$\frac{7}{8}$	$\frac{63}{16}$

$\frac{264}{16}$ **16.5**

4) D

D $\int_3^7 (3x^2 + 2x)\,dx$ (A)

5) 

$\frac{1}{2}\pi(3)^2 = \frac{9\pi}{2}$ (D)

6) D Product. Make sure that you can find the areas eg:

$\int_5^7 [f(x) + g(x)]\,dx = \int_5^7 f(x)dx + \int_5^7 g(x)dy$

$6 + 10 = 16$

$\int_5^7 [f(x) - g(x)]\,dx = \int_5^7 f(x)dx - \int_5^7 g(x)dy$

$6 - 10 = -4$

etc.

(7) $\frac{1}{4-2}\int_2^4 x^3-3x^2\,dx$

use fnInt for $\int_2^4 x^3-3x^2\,dx$

↳ math 9

$\frac{1}{2}$. Answer

(B)