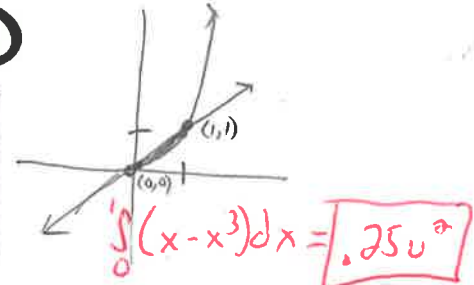


Stewart Calc 1: pg 313 #2-28 even

2 $\int_0^6 ((3x) - (x^2 - 4x)) dx$
 $\int_0^6 (-x^2 + 6x) dx = 36u^2$

4 $\int_0^3 (x^2 - (y-5)) dy$
 $\int_0^3 (y^2 - y + 5) dy = 16.5u^2$



8
 $\int_{-1}^1 (x^2 - x^4) dx = 2/3u^2$

10 $3y = x+1$
 $y = 1/3x + 1/3$

 $\int_0^5 (\sqrt{x-1} - (1/3x + 1/3)) dx = 1/6u^2$

12
 $\int_{-1}^1 ((1-x^2) - (x^4-x^2)) dx$
 $\int_{-1}^1 (-x^4 + 1) dx = 1.6u^2$

14
 $8u^2$

16 $y^2 = -x+2$
 $y = \pm\sqrt{-x+2}$
 $y = -x$

 $\int_{-2}^1 ((2-y^2) - (-y)) dy$
 $\int_{-1}^2 (-y^2 + y + 2) dy = 4.5u^2$

18
 $\int_0^4 ((x^3 - 4x^2 + 3x) - (x^2 - x)) dx$
 $\int_0^4 (x^3 - 5x^2 + 4x) dx = .58\bar{3}$
 $\int_0^4 ((x^2 - x) - (x^3 - 4x^2 + 3x)) dx$
 $\int_0^4 (-x^3 + 5x^2 - 4x) dx = 11.25$
 } 11.833 or 115/60u^2

$\int_{-2}^2 ((2-x^2) - (x^2-1)) dx$
 $\int_{-2}^2 (2x^2 - 2) dx = 2 \cdot 2/3$
 $\int_{-1}^1 ((3-x^2) - (x^2-1)) dx$
 $\int_{-1}^1 (2 - 2x^2) dx = 2 \cdot 2/3$
 $\int_{-1}^1 (2x^2 - 2) dx = 2 \cdot 2/3$

22
 $\int_0^{\pi/3} (\sin(2x) - \sin(x)) dx = 1/4$
 $\int_{\pi/3}^{\pi/2} (\sin(x) - \sin(2x)) dx = 1/4$
 $1/2u^2$

24
 $\int_0^{\pi/4} (\cos(2x) - \sin(x)) dx = .299$
 $\int_{\pi/4}^{\pi/2} (\sin(x) - \cos(2x)) dx = .092$
 $0.391u^2$

26
 $\int_0^2 (|x-1| - (x^2-3)) dx$
 $\int_0^2 (|x-1| - x^2 + 3) dx = 4 \frac{1}{3} u^2$

28
 $\int_{-\pi/4}^{\pi/4} (\sec^2(x) - \cos(x)) dx = .586u^2$