Ch 6.3 # 1, 3, 4, 6, 8, 10, 11, 14, 15, 16

1.

a. 0
b. -6
c. -12
d. 10
e. -2
f. 16

3.

a. 5
b. 5sqrt(3)
c. -5
d. -5

4.

a. -sqrt(2)
b. sqrt(2)
c. -sqrt(2)
d. 1

6.

a. 6
b. 6

8.

9. If f is integrable, then int(a, b)f(x)dx <= f_max * (b-a), where f_max is 0, so int(a, b)f(x)dx <= 0

10. ∫0→√3: (x^2 - 1)dx = 0
    0 = x^2 - 1
    1 = x^2
    x = 1

11. ∫0→3: ((x - 1)^2)dx = 3
    3 = (x - 1)^2
    √3 = x - 1
    x = 1 + √3

12.

0.5 * b * h
0.5 * 6 * 3
9

16.

2 - πr^2
2 - π