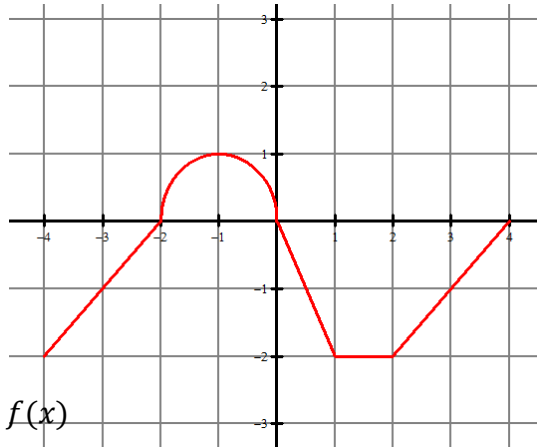


Corrective

The graph of f consists of line segments and a semicircle. Evaluate each definite integral.

1.



$$(a) \int_{-4}^{-2} f(x) dx =$$

$$(b) \int_{-2}^0 4f(x) dx =$$

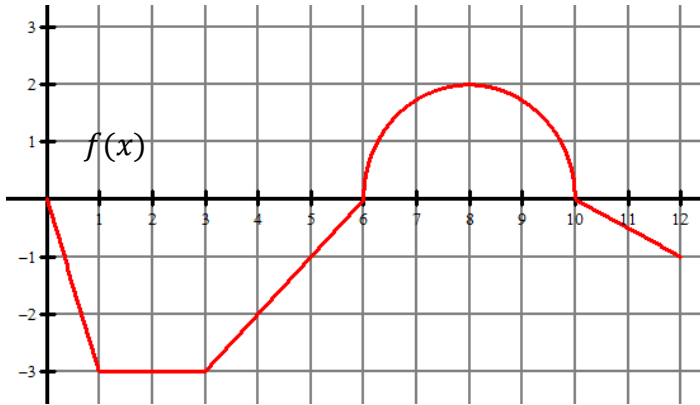
$$(c) \int_4^0 f(x) dx =$$

$$(d) \int_{-4}^4 f(x) dx =$$

$$(e) \int_4^2 f(x) dx =$$

$$(f) \int_{-1}^1 f(x) dx =$$

2.



$$(a) \int_0^6 2f(x) dx =$$

$$(b) \int_{10}^{12} f(x) dx =$$

$$(c) \int_{10}^6 f(x) dx =$$

$$(d) \int_0^{12} f(x) dx =$$

$$(e) \int_8^8 f(x) dx =$$

$$(f) \int_3^5 3f(x) dx =$$

3. Suppose that $\int_{-4}^6 f(x) dx = 2$ and $\int_6^8 f(x) dx = -5$. Find each integral.

$$(a) \int_{-4}^6 5f(x) dx =$$

$$(b) \int_{-4}^8 f(x) dx =$$

$$(c) \int_8^6 f(x) dx =$$

4. Suppose that $\int_0^3 f(x) dx = -4$ and $\int_3^7 f(x) dx = 2$. Find each integral.

$$(a) \int_3^0 f(x) dx =$$

$$(b) \int_3^3 f(x) dx =$$

$$(c) \int_3^7 6f(x) dx =$$

5. Suppose that $\int_{-2}^1 f(x) dx = 5$ and $\int_{-2}^5 f(x) dx = 8$. Find each integral.

$$(a) \int_1^{-2} f(x) dx =$$

$$(b) \int_{-2}^1 [-f(x)] dx =$$

$$(c) \int_1^5 f(x) dx =$$

6. Suppose that $\int_{-6}^{-2} f(x)dx = -3$ and $\int_{-6}^4 f(x)dx = 2$. Find each integral.

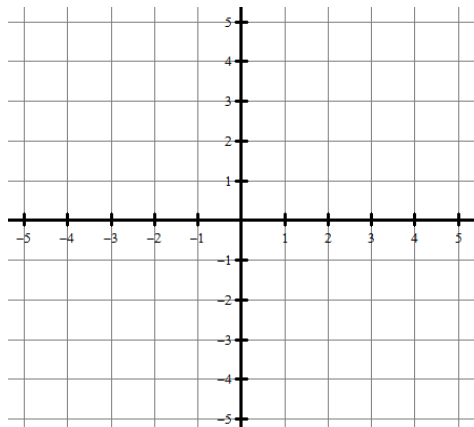
(a) $\int_{-2}^4 f(x)dx =$

(b) $\int_{-2}^{-6} f(x)dx =$

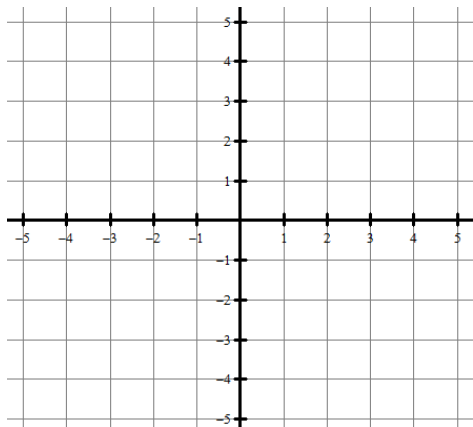
(c) $\int_{-6}^4 5f(x)dx =$

Sketch a graph of the definite integral without the calculator. Evaluate with the graphing calculator.

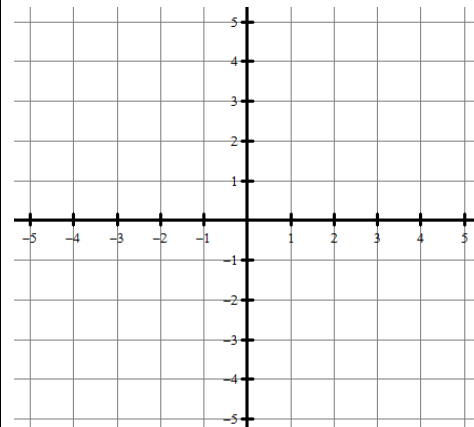
7. $\int_{-1}^0 (x^3 - 1)dx =$



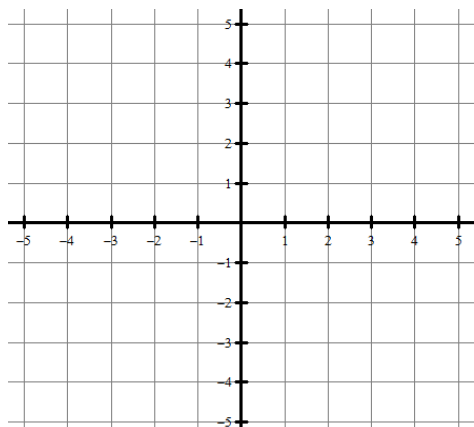
8. $\int_{-1}^2 (5 - x^2)dx =$



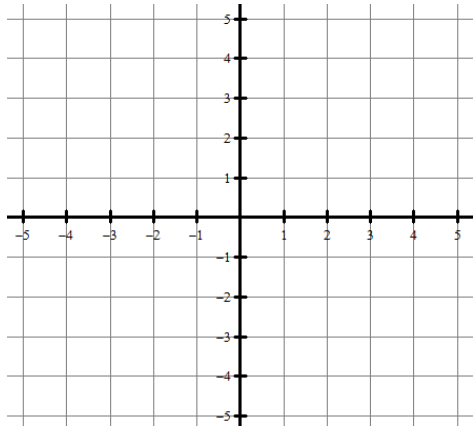
9. $\int_{-2}^3 -|x + 1|dx =$



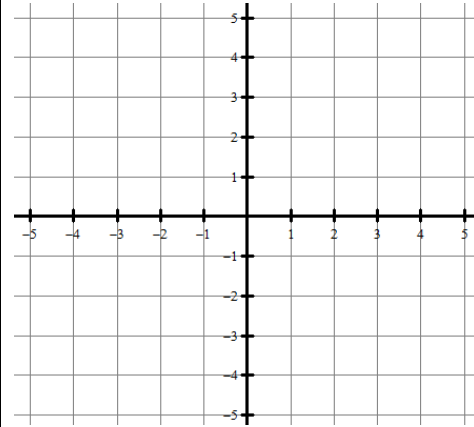
10. $\int_{-1}^3 \left(\frac{x}{3} - 2\right) dx =$



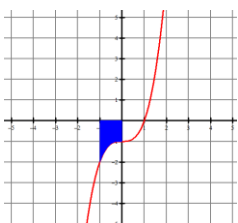
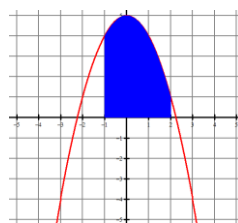
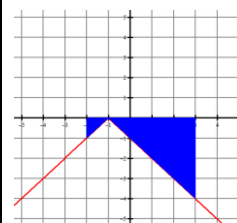
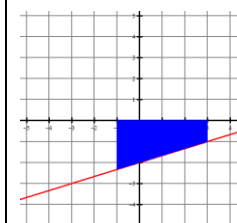
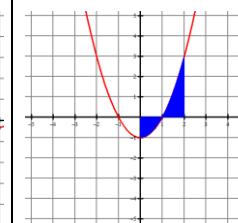
11. $\int_0^2 (x^2 - 1)dx =$



12. $\int_{-1}^4 \sqrt{x + 3} dx =$



ANSWERS TO CORRECTIVE ASSIGNMENT

1. (a) -2 (b) 2π (c) 5 (d) $\frac{\pi}{2} - 7$ (e) 2 (f) $\frac{\pi}{4} - 1$	2. (a) -24 (b) 1 (c) -2π (d) $2\pi - 13$ (e) 0 (f) -12	3. (a) 10 (b) -3 (c) 5	4. (a) 4 (b) 0 (c) 12	5. (a) -5 (b) -5 (c) 3	6. (a) 5 (b) 3 (c) 10
7. -1.25 	8. 12 	9. -8.5 	10. $-6.\bar{6}$ 	11. $0.\bar{6}$ 	12. 10.461 