

Integrals Using Geometry

Directions: Use geometry to find the value of each integral.

1. $\int_0^4 (2x + 1) dx$

2. $\int_0^3 (-x + 3) dx$

3. $\int_{-1}^1 (2x + 3) dx$

4. $\int_0^5 (x - 2) dx$

5. $\int_4^6 |x| dx$

6. $\int_{-3}^3 (-|2x| + 6) dx$

7. $\int_{-3}^3 \sqrt{9 - x^2} dx$

8. $\int_{-2}^0 \sqrt{4 - x^2} dx$

9. $\int_{-4}^4 -\sqrt{16 - x^2} dx$

10. $\int_{-5}^5 (5 - \sqrt{25 - x^2}) dx$