

Math 2143 - Brief Calculus with Applications

Discussion Board Week 5 - Due 2016.07.10

For this week, we are going to compare geometry and integration. You are to integrate each linear function, and then also interpret the integral as an area, and to calculate this area using geometry (think squares and rectangles). Drawing a picture would be nice for this problem.

1. $\int_2^4 3x - 1 dx$

2. $\int_{-1}^3 2x + 4 dx$

3. $\int_0^4 2x + 3 dx$

4. $\int_{-2}^1 -3x + 4 dx$

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

6. $\int_6^9 \frac{1}{3}x - 2 dx$

7. $\int_4^8 \frac{1}{2}x - 1 dx$

8. $\int_5^{10} \frac{1}{10}x + 4 dx$

9. $\int_5^{10} 2x - 3 dx$

10. $\int_1^2 2x - 1 dx$