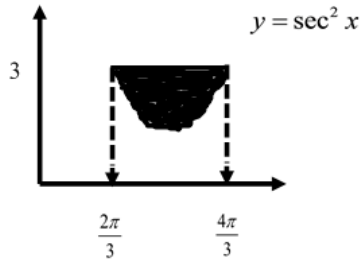
Review 5.4 & 5.5

1. Evaluate using Part 2 of the Fundamental Theorem of Calculus.

$$\int_2^5 \frac{8}{x^5}dx$$

2. Find the area of the shaded region.



3. Use NINT to find the approximate value of $\int_{1.2}^{2.5} \frac{\sin^2 x}{x-3}dx$

4. Find $\frac{dy}{dx}$ if $y = \int_0^{4x} (3t^2 - 6t + 1)dt$

5. Use the Trapezoidal Rule with n=3 to approximate the value of

$$\int_1^7 (3x^2 + 1)dx$$

6. Use Simpson's Rule with n=4 to approximate the value of

$$\int_{-3}^1 (4 - x)^2 dx$$

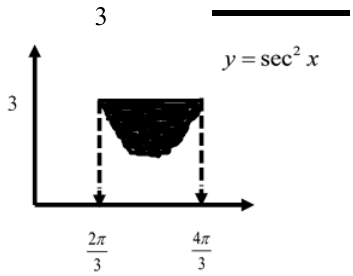
Review 5.4 & 5.5

1. Evaluate using Part 2 of the Fundamental Theorem of Calculus.

$$\int_2^5 \frac{8}{x^5}dx$$

609/5000 = .1218

2. Find the area of the shaded region.



2pi - 2sq rt(3)

3. Use NINT to find the approximate value of $\int_{1.2}^{2.5} \frac{\sin^2 x}{x-3}dx$

-.95

4. Find $\frac{dy}{dx}$ if $y = \int_0^{4x} (3t^2 - 6t + 1)dt$

$192x^2 - 96x + 4$

5. Use the Trapezoidal Rule with n=3 to approximate the value of

$$\int_1^7 (3x^2 + 1)dx$$

360

6. Use Simpson's Rule with n=4 to approximate the value of

$$\int_{-3}^1 (4 - x)^2 dx$$

316/3 = 105.3