

## Cálculo 2 - Lista 16

### Exercícios adicionais

$$1. \int \frac{\sec^4 x}{\tan^2 x} dx$$

$$2. \int \frac{\cos x}{\sin^3 x} dx$$

$$3. \int \sqrt{\tan x} \sec^4 x dx$$

$$4. \int \frac{1}{\sin^4 t} dt$$

$$5. \int \frac{\tan^3 x \sec^2 x}{\sin^2 x} dx$$

$$6. \int \frac{\csc^2 \theta}{\cot^2 \theta} d\theta$$

$$7. \int \frac{\sec^2 x}{\sqrt{1+\tan x}} dx$$

$$8. \int \frac{3+4 \csc^2 x}{\cot^2 x} dx$$

$$9. \int \frac{\csc^4 x}{\cot^3 x} dx$$

### Respostas

$$1. -\cot x + \tan x + C$$

$$2. -\frac{1}{2} \csc x + C$$

$$3. \frac{2}{3} \tan^{3/2} x + \frac{2}{7} \tan^{7/2} x + C$$

$$4. -\cot t - \frac{1}{3} \cot^3 t + C$$

$$5. \frac{1}{4} \sec^4 x + C$$

$$6. \tan \theta + C$$

$$7. 2\sqrt{1+\tan x} + C$$

$$8. 7 \tan x - 3x + C$$

$$9. \frac{1}{2} \tan^2 x + \ln |\tan x| + C$$