

## Lista de Exercícios – Derivadas de Logaritmos

### Parte I – Exercícios

- 1) Calcule  $d/dx[\ln(x)]$
- 2) Calcule  $d/dx[\ln(5x+3)]$
- 3) Calcule  $d/dx[\ln(x^2+1)]$
- 4) Calcule  $d/dx[\ln(x^{1/2})]$
- 5) Calcule  $d/dx[\ln(\sin(x))]$
- 6) Calcule  $d/dx[\ln(\tan(x))]$
- 7) Calcule  $d/dx[\ln(e^x+1)]$
- 8) Calcule  $d/dx[\ln(x^3 \cdot e^x)]$
- 9) Calcule  $d/dx[\ln(\cos(x^2))]$
- 10) Calcule  $d/dx[\ln((x^2+1)/x)]$

## Parte II – Gabarito

1)  $1/x$

2)  $5/(5x+3)$

3)  $2x/(x^2+1)$

4)  $1/(2x)$

5)  $\cot(x)$

6)  $1/(\sin(x)\cos(x))$

7)  $e^x/(e^x+1)$

8)  $3/x + 1$

9)  $-2x \tan(x^2)$

10)  $2x/(x^2+1) - 1/x$