

LISTA DE EXERCÍCIOS: INTEGRAIS

- Calcular as integrais imediatas:

1) $\int (2t^3 - 5t^2 - 3t + 4)dt =$

2) $\int at^5 dt =$

3) $\int \frac{tdt}{t^2} =$

4) $\int (e^t + 1)^3 \cdot e^t dt =$

5) $\int \frac{e^\theta d\theta}{a + be^\theta} =$

6) $\int \text{sen} t \cos t dt =$

7) $\int \cos nt dt =$

8) $\int \frac{dt}{e^t} =$

9) $\int e^t \cos e^t dt =$

10) $\int 5 \text{sen}^2 5t dt =$

11) $\int \frac{e^{1/t}}{t^2} dt =$

12) $\int \frac{t+2}{t+1} dt =$

- Calcular as integrais por partes:

13) $\int te^{at} dt =$

14) $\int t \cdot \ln(t) \cdot dt$

15) $\int t^2 \text{sen}(t) dt =$

16) $\int e^\theta \cos(\theta) d\theta =$

- Calcular as integrais definidas:

17) $\int_{-\pi}^{\pi} \text{sen}(nt) dt =$

18) $\int_0^{\pi/2} e^{\text{sen}(t)} \cos(t) dt =$

19) $\int_0^{\pi} t \text{sen}(t) dt =$

