



Identificação do Discente:

Matrícula: -

Situação: -

Nome: Lista avulsa para treino.

Curso: -

Determine as derivadas de primeira e de segunda ordem das funções a seguir:

1. t^4
2. $t^3 + 8t^2 - 9t - 1$
3. e^{-4t}
4. e^{-10t}
5. $\text{sen}(-2t)$
6. $\text{sen}(6t)$
7. $\text{cos}(6t)$
8. $\text{cos}(2t)$
9. $\text{tg}(-6t)$
10. e^{2t}
11. $-9x^2 - 6t^2 - 4xt + 2x + 7t + 9$
12. $5x^2 + 6t^2 - 7xt + 8x - 8t + 1$
13. $-3 \text{tg}(-2x + 5t + 5)$
14. $2 \text{tg}(-3x + 3t + 4)$
15. $-7 \text{sen}(9x + 6t - 8)$
16. $7 \text{sen}(5x + 3t + 1)$
17. $3 \text{cos}(8x - 9t + 1)$
18. $3 \text{cos}(-2x - 8t - 3)$
19. $7e^{-8x+2t+5}$
20. $2e^{-5x+4t-8}$
21. $(\text{cos}(-4x)) \text{cos}(-3x)$
22. $(\text{cos}(7x)) \text{cos}(6x)$
23. $(\text{cos}(3x)) \text{sen}(-6x)$
24. $(e^{10x}) \text{cos}(3x)$
25. $(2x + 6t - 9) \text{cos}(-7x - 3t - 1)$
26. $4 \text{sen}(2x - 2t - 7) \text{cos}(4x^2 - 5t^2 + 5xt + 6x - 6t - 6)$
27. $-7e^{-9x^2+6t^2-3xt+8x-5t+4} \text{tg}(4x - 9t + 6)$
28. $(8x^2 - 4t^2 - 7xt + 3x + 6t + 3) \text{tg}(-5x^2 - 9t^2 - 8xt - 2x - 4t - 3)$
29. $\frac{-4 \text{sen}(-7x + 4t + 7)}{(\text{sen}(10x)) \text{cos}(3x)}$
30. $\frac{8 \text{sen}(4x + 3t - 2)}{(\text{sen}(4t)) \text{tg}(-10t)}$
31. $\frac{(3x + 9t + 6) \text{cos}(5x + 3t - 7)}{-2 \text{sen}(-8x - 6t - 5)}$
32. $\frac{-8e^{6x^2+7t^2+9xt-3x-4t-1} \text{tg}(9x^2 + 3t^2 + 5xt - 6x - 8t - 1)}{7 \text{sen}(-2x + 4t + 7)}$