Lista 1 - Cálculo de primitivas

Calcule:

1. $\int x^5 dx$

2. $\int (x^3+2)^5 3x^2 dx$

3. $\int (x^3+2)^5 x^2 dx$

4. $\int \sqrt{x^3+2}\, x^2 dx$

5. $\int \dfrac{x^2}{x^3+2} dx$

6. $\int cosx dx$

7. $\int cos7x dx$

8. $\int xcosx^2 dx$

9. $\int \dfrac{x^2}{(x^3+2)^4} dx$

10. $\int e^{6x} dx$

11. $\int x^3 e^{x^4} dx$

12. $\int cos^5 x senx dx$

13. $\int x\sqrt{3+4x^2} dx$

14. $\int e^x \sqrt{3}2+e^x dx$

15. $\int xe^{-x^2} dx$

16. $\int cos^3 x dx$

17. $\int cos2x dx$

18. $\int cos^2 x dx$

19. $\int sen^2 x dx$

20. $\int sen^3 x dx$

21. $\int \dfrac{1}{x} dx$

22. $\int \dfrac{1}{3x+4} dx$

23. $\int \dfrac{cosx}{senx} dx$

24. $\int cotgx dx$

25. $\int tgx dx$

26. $\int sec^2 x dx$

27. $\int tg^2 x dx$

28. $\int \dfrac{sec^2 x}{5+3tgx} dx$

29. $\int \dfrac{1}{1+x^2} dx$

30. $\int \dfrac{1}{1+4x^2} dx$

31. $\int \dfrac{2}{4+5x^2} dx$

32. $\int \dfrac{x}{4+5x^2} dx$

33. $\int \dfrac{x}{1+x^4} dx$

34. $\int xe^x dx$

35. $\int xsenx dx$

36. $\int xlnx dx$

37. $\int lnx dx$

38. $\int \dfrac{2x-3}{(x-1)^2} dx$

39. $\int \dfrac{x}{x^2-4} dx$