Kalkulatu hurrengo deribatuak

1. $y = x^3 - \dfrac{1}{2}x^2 + 2x - 12$

2. $y = (ax+b)^2$, donde a y b son constantes.

3. $y = (x^2+3)(2x^2+x+1)$

4. $y = \dfrac{2x-3}{3x+5}$

5. $y = \sqrt{x^2+5}$

6. $y = \sqrt[3]{x^2-1}$

7. $y = \sqrt[5]{x^2-7x}$

8. $y = \dfrac{x^2-5x}{x^3-1}$

9. $y = \sqrt{x^2-4x+5}$

10. $y = \sqrt{\dfrac{x+3}{x-1}}$

11. $y = \dfrac{x^3-12x+2}{x^2-7}$

12. $y = \sqrt{\dfrac{2x+3}{x-2}}$

13. $y = \dfrac{\sqrt{x}-1}{\sqrt{x}+1}$

14. $y = \left(\dfrac{x^3-1}{2x^3+1}\right)^4$

15. $y = (x-1)\sqrt{x^2-2x+2}$

16. $y = \sqrt{1+\sqrt{x}}$

17. $y = 2x^2\sqrt{2-x}$

18. $y = \sqrt{2x}+2\sqrt{x}$

19. $y = x\sqrt{3x^2-1}$

20. $y = \dfrac{2x}{\sqrt{x-1}}$

21. $y = \sqrt{\ln x}$

22. $y = \ln\sqrt[4]{x^3}$

23. $y = \ln\dfrac{2-x}{2+x}$

24. $y = \ln\left(x\sqrt{1+x^2}\right)$

25. $y = \dfrac{\ln x}{e^x}$

26. $y = \ln\sqrt{x(x-1)}$

27. $y = \ln\left(x+\sqrt{x^2-1}\right)$

28. $y = \ln\dfrac{e^x}{e^x-1}$

29. $y = e^{2x}\ln x^2$

30. $y = \ln\dfrac{(x-2)^3}{\sqrt{2x-1}}$

31. $y = x^3 e^{-3x}$

32. $y = \ln\dfrac{e^x-1}{e^x+1}$

33. $y = \ln\sqrt{\dfrac{1-x}{1+x}}$

34. $y = (x^2-2x+2)e^x$

35. $y = x^3\ln x - \dfrac{x^3}{3}$

36. $y = (a+x)\sqrt{a-x}$, donde a es una constante.

37. $y = \ln\dfrac{\sqrt{1+e^x}-1}{\sqrt{1+e^x}+1}$

38. $y = x - 2\sqrt{x}+2\ln\left(1+\sqrt{x}\right)$

39. $y = 5\ln^3(ax+b)$, donde a y b son constantes.

40. $y = \sqrt[3]{a+bx^3}$, donde a y b son constantes.

41. $y = \sqrt{xe^x+x}$

42. $y = x^2 \cdot e^{2x}$

EMAITZAK

1. $y' = 3x^2 - x + 2$

2. $y' = 2a(ax+b) = 2a^2x + 2ab$

3. $y' = 8x^3 + 3x^2 + 14x + 3$

4. $y' = \dfrac{19}{(3x+5)^2}$

5. $y' = \dfrac{x}{\sqrt{x^2+5}}$

6. $y' = \dfrac{2x}{3\sqrt[3]{(x^2-1)^2}}$

7. $y' = \dfrac{2x-7}{5\sqrt[5]{(x^2-7x)^2}}$

8. $y' = \dfrac{-x^4 + 10x^3 - 2x + 5}{(x^3-1)^2}$

9. $y' = \dfrac{x-2}{\sqrt{x^2-4x+5}}$

10. $y' = \dfrac{-2}{(x-1)\sqrt{x^2+2x-3}}$

11. $y' = \dfrac{x^4 - 9x^2 - 4x + 84}{(x^2-7)^2}$

12. $y' = \dfrac{-7}{2(x-2)\sqrt{2x^2-x-6}}$

13. $y' = \dfrac{1}{\sqrt{x}\left(\sqrt{x}+1\right)^2}$

14. $y' = \dfrac{36x^2(x^3-1)^3}{(2x^3+1)^5}$

15. $y' = \dfrac{2x^2-4x+3}{\sqrt{x^2+2x+2}}$

16. $y' = \dfrac{1}{4\sqrt{x+x\sqrt{x}}}$

17. $y' = \dfrac{-5x^2+8x}{\sqrt{2-x}}$

18. $y' = \dfrac{1+\sqrt{2}}{\sqrt{2x}}$

19. $y' = \dfrac{6x^2-1}{\sqrt{3x^2-1}}$

20. $y' = \dfrac{x-2}{(x-1)\sqrt{x-1}}$

21. $y' = \dfrac{1}{2x\sqrt{\ln x}}$

22. $y' = \dfrac{3}{4x}$

23. $y' = \dfrac{4}{x^2-4}$

24. $y' = \dfrac{2x^2+1}{x(1+x^2)}$

25. $y' = \dfrac{1-x\ln x}{xe^x}$

26. $y' = = \dfrac{2x-1}{2x(x-1)}$

27. $y' = \dfrac{1}{\sqrt{x^2-1}}$

28. $y' = \dfrac{1}{1-e^x}$

29. $y' = \dfrac{4xe^{2x}\ln x + 2e^{2x}}{x}$

30. $y' = \dfrac{5x-1}{(x-2)(2x+1)}$

31. $y' = 3x^2e^{-3x}(1-x)$

32. $y' = \dfrac{2e^x}{e^{2x}-1}$

33. $y' = \dfrac{1}{x^2-1}$

34. $y' = x^2e^x$

35. $y' = 3x^2\ln x$

36. $y' = \dfrac{a-3x}{2\sqrt{a-x}}$

37. $y' = \dfrac{1}{\sqrt{e^x+1}}$

38. $y' = \dfrac{\sqrt{x}}{\sqrt{x}+1}$

39. $y' = \dfrac{15a\ln^2(ax+b)}{ax+b}$

40. $y' = \dfrac{bx^2}{\sqrt[3]{(a+bx^3)^2}}$

41. $y' = \dfrac{e^x + xe^x + 1}{2\sqrt{xe^x+x}}$

42. $y' = 2xe^{2x}(1+x)$