

أجد مشتقة كل افتران مما يأتي :

1.  $F(x) = (7x - 5)^{-4}$

2.  $F(x) = \left(\frac{3}{4}x^4 - 5x^2\right)^{\frac{3}{7}}$

3.  $F(x) = \sqrt{X^3 - 5X} + 7(9x + 1)^5$

4.  $F(x) = (\sqrt{X^3 - 2} + 5)^2$

5.  $F(x) = \frac{7}{x-3} + 3X^3 + 9X^2$

6.  $F(x) = \sqrt[5]{X^6}$

7.  $F(x) = \frac{5}{\sqrt[3]{2X-8}}$

8.  $F(x) = \sqrt{(3x^2 - 5)^3} + (3 - 2x^3)^4$

$$9. F(x) = \sqrt[3]{2x + (x^2 + x)^4}$$

$$10. F(x) = (x^2 + 4)^5 (7x^4 - 5x)$$

$$11. F(x) = \sqrt{x^3 - 5} (7x + 8)$$

$$12. F(x) = x^3 (2 - 4x)^{-4}$$

$$13. F(x) = \left(x^2 + \frac{3}{x}\right) (x^3 - 5x)$$

$$14. F(x) = \frac{x^5 + 7x^{-2}}{3x + 1}$$

$$15. F(x) = \frac{3}{(x^3 - 5)^2}$$

$$16. F(x) = 3x^{-7} (X^5 - 2x)$$

$$17. F(x) = \frac{x^3}{2 - 5x}$$

$$18. F(x) = \frac{6X^2}{\sqrt{6x - 2}}$$

$$19. F(x) = \frac{3}{x^3} + \frac{2x^3}{5} + 7$$

$$20. F(x) = e^{-5x^2} + 3e^{7x} - e^5$$

$$21. F(x) = x^3 - 5e^{3x} + \frac{7}{x^2}$$

$$22. F(x) = (x^3 - 5x)e^{2x}$$

$$23. F(x) = \frac{3e^{x^2}}{x^3 - 5}$$

$$24. F(x) = 6x - 9 + 8e^{3x}$$

$$25. F(x) = 3 \ln 3x + e^{9x^2}$$

$$26. F(x) = \frac{\ln x}{x^3}$$

$$27. F(x) = x^3 \ln 2x$$

$$28. F(x) = \ln \sqrt{x^3 - 2x}$$

$$29. F(x) = (\ln 3x^2)^4$$

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$$30. F(x) = \ln \frac{x^3}{2x-5}$$

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$$31. F(x) = \ln 3 - e^{2x}$$

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$$32. F(x) = e^{4x} \ln 5x^2$$

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$$33. F(x) = 3 \sin 6x^2 + \cos 5x$$

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$$34. F(x) = \cos 7x - \sin 3x$$

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$$35. F(x) = \sin^3(2x^2 - 5)$$

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$$36. F(x) = (\cos 6x - \sin x^3)^5$$

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$$37. F(x) = \sqrt{\cos 3x} + e^{3x}$$

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$$38. F(x) = \sin \sqrt[3]{x^5}$$

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$$39. F(x) = (8x^3 - 6x) \cos 4x^2$$

$$40. F(x) = (\ln 3x)^5 \sin 7x^3$$

$$41. F(x) = (\sin(5x^2 - 21))^7$$

$$42. F(x) = \frac{\ln x^3}{\cos x}$$

$$43. F(x) = \frac{3e^{6x}}{\sin 3x}$$

$$44. F(x) = (e^{7x^3})(\sin 6x)^3$$

$$45. F(x) = \sin(5x) \ln(\cos x)$$

$$46. F(x) = \ln \frac{3}{x^2 - 5}$$

$$47. F(x) = \frac{\sqrt{\sin 5x}}{x^3}$$



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