

Производная функция

Найти производную:

1) $y = 2x^5 - 3$

2) $y = \sqrt{x} - 3x$

3) $y = \sqrt[3]{x^2} + 5$

4) $y = \frac{7}{x}$

5) $y = \frac{9}{x^3}$

6) $y = \frac{4}{\sqrt[5]{x}}$

7) $y = \frac{6}{\sqrt[4]{x^7}} + \log_9 x$

8) $y = 5^x \cdot \operatorname{arctg} x$

9) $y = \sqrt{x} \cdot \operatorname{tg} x$

10) $y = \frac{7x^3 - 4x + 9}{\cos x}$

11) $y = \frac{\arcsin x + 4e^x}{\operatorname{ctg} x}$

12) $y = \cos(7x + 3)$

13) $y = \ln(9x^2 - 4)$

14) $y = \operatorname{tg}(\ln x)$

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

16) $y = (2x^6 + 3)^5$

17) $y = \operatorname{tg}^8\left(\frac{x}{2}\right)$

18) $y = e^x \cdot \operatorname{arctg} e^x - \ln \sqrt{1 + e^{2x}}$

19) $y = \sqrt{\cos^5\left(\operatorname{ctg}\left(\frac{1}{2-x}\right)\right)}$

20) $y = 5^{\sin^4 x - \arccos 3x}$

21) $y = \ln^4\left(\ln^3\left(\ln(3 - 8x^4)\right)\right)$

22) $y = \ln^9\left(\frac{6 - 7x}{x + 2}\right)$