

Найдите производную функции

Вариант №1	Вариант №2	Вариант №3	Вариант №4	Вариант №5
1) $y = x^5 - 8x$	1) $y = x^6 - 7x$	1) $y = 7x + x^4$	1) $y = x^7 - 13x$	1) $y = -8x + x^{12}$
2) $y = 2x^8 + 8x^3 - 5$	2) $y = 6x^4 + 9x^3 - 10$	2) $y = 3x^7 + 10x^2 - 13$	2) $y = 6x^3 + 2x^5 - 9$	2) $y = 9x^2 + 5x^4 + 15$
3) $y = 13x - \sqrt{x}$	3) $y = \sqrt{x} - 15x$	3) $y = 4x + \sqrt{x}$	3) $y = 3x - \sqrt{x}$	3) $y = 9x - 3\sqrt{x}$
4) $y = \frac{1}{x} + 6x^{-4} + 3$	4) $y = 5x^{-2} - \frac{1}{x} + 9$	4) $y = \frac{1}{x} + 3x^3 - 35$	4) $y = 5 - \frac{1}{x} + 5x^{-4}$	4) $y = \frac{1}{x} - 7x^{-4} + 10$
5) $y = -\frac{5}{x^3} - \sin x$	5) $y = \frac{4}{x^5} - \operatorname{tg} x$	5) $y = -\frac{6}{x^8} - \operatorname{ctg} x$	5) $y = \frac{10}{x^3} - 4 \cos x$	5) $y = -\frac{2}{x^4} - 3 \sin x$
6) $y = \cos x + \sqrt{x}$	6) $y = 5 \sin x + \sqrt{x}$	6) $y = \sqrt{x} - 3 \cos x$	6) $y = \operatorname{ctg} x + \sqrt{x}$	6) $y = \operatorname{tg} x + \sqrt{x}$
7) $y = \frac{2}{x^{-6}} - 3 \operatorname{tg} x$	7) $y = \frac{6}{x^{-3}} - \cos x$	7) $y = -\frac{4}{x^5} - \sin x$	7) $y = \frac{8}{x^{-3}} - 2 \sin x$	7) $y = \frac{5}{x^{-6}} + \operatorname{ctg} x$
8) $y = (x^3 - 4)(2 + x^4)$	8) $y = (x^6 + 3)(x^4 - 4)$	8) $y = (x^9 - 1)(10 + x^2)$	8) $y = (x^2 - 5)(x^4 - 3)$	8) $y = (x^4 + 7)(1 + x^5)$
9) $y = \sqrt{x}(5x - 3)$	9) $y = \sqrt{x}(6x - 1)$	9) $y = \sqrt{x}(3x - 4)$	9) $y = \sqrt{x}(2x - 5)$	9) $y = \sqrt{x}(3 - 4x)$
10) $y = x^5 \sin x$	10) $y = x^6 \cos x$	10) $y = x^4 \sin x$	10) $y = x^7 \operatorname{tg} x$	10) $y = x^8 \cos x$
11) $y = \left(\frac{5}{x} - 2\right)(4x + 2)$	11) $y = \left(\frac{3}{x} - 4\right)(3x + 6)$	11) $y = \left(\frac{2}{x} - 5\right)(3x + 7)$	11) $y = \left(\frac{4}{x} + 1\right)(3x + 9)$	11) $y = \left(\frac{6}{x} - 7\right)(x + 2)$
12) $y = \frac{2x^6}{3x - 8}$	12) $y = \frac{4x^5}{2x + 5}$	12) $y = \frac{5x^3}{2x - 7}$	12) $y = \frac{3x^6}{2x - 1}$	12) $y = \frac{8x^3}{2x - 9}$
13) $y = \frac{3\sqrt{x}}{x^4 - 5}$	13) $y = \frac{9\sqrt{x}}{6 + 2x^5}$	13) $y = \frac{-2\sqrt{x}}{x^6 - 2}$	13) $y = \frac{5\sqrt{x}}{x^5 + 2}$	13) $y = \frac{4\sqrt{x}}{x^3 + 5}$
14) $y = \frac{\operatorname{ctg} x}{6x}$	14) $y = \frac{4x}{\operatorname{ctg} x}$	14) $y = \frac{\operatorname{tg} x}{2x^2}$	14) $y = \frac{2 \cos x}{7x}$	14) $y = \frac{\sin x}{4x^3}$

Вариант №6	Вариант №7	Вариант №8	Вариант №9	Вариант №10
1) $y = x^2 - 6x$	1) $y = 4x - 7x^6$	1) $y = x^{13} - 5x$	1) $y = -9x + x^{10}$	1) $y = 10x + x^{16}$
2) $y = 3x^8 + 8x^3 - 9$	2) $y = x^4 + 9x^5 - 16$	2) $y = 12x^3 + 6x^2 - 42$	2) $y = -2x^2 + 4x^4 + 11$	2) $y = 9x^2 + 3x^4 - 14$
3) $y = 12x + 2\sqrt{x}$	3) $y = 5\sqrt{x} - 12x$	3) $y = 10x - 2\sqrt{x}$	3) $y = 6x + \sqrt{x}$	3) $y = -8x + \sqrt{x}$
4) $y = \frac{1}{x} + 5x^{-4} - 16$	4) $y = 9x^{-2} - \frac{1}{x} - 14$	4) $y = 3 - \frac{1}{x} + 4x^{-5}$	4) $y = \frac{1}{x} - 5x^{-4} + 9$	4) $y = \frac{1}{x} + 15x^3 - 5$
5) $y = \frac{8}{x^4} - 4 \sin x$	5) $y = \frac{7}{x^5} - \operatorname{ctgx}$	5) $y = \frac{5}{x^3} - 3 \cos x$	5) $y = -\frac{4}{x^4} - 5 \sin x$	5) $y = -\frac{3}{x^8} - \operatorname{tgx}$
6) $y = \cos x + 2\sqrt{x}$	6) $y = 3 \sin x + \sqrt{x}$	6) $y = \operatorname{ctgx} + 6\sqrt{x}$	6) $y = \operatorname{tgx} + 2\sqrt{x}$	6) $y = 5\sqrt{x} - \cos x$
7) $y = -\frac{5}{x^{-6}} + \operatorname{tgx}$	7) $y = \frac{7}{x^{-3}} + \sin x$	7) $y = \frac{2}{x^{-3}} + 5 \sin x$	7) $y = \frac{4}{x^{-7}} + \operatorname{ctgx}$	7) $y = -\frac{2}{x^5} - 4 \sin x$
8) $y = (x^3 - 6)(2 + x^6)$	8) $y = (x^9 + 3)(x^2 - 4)$	8) $y = (x^2 + 4)(8 - x^4)$	8) $y = (x^8 + 1)(2 + x^2)$	8) $y = (x^3 - 1)(12 + x^2)$
9) $y = \sqrt{x}(4x - 4)$	9) $y = \sqrt{x}(12x - 1)$	9) $y = \sqrt{x}(5x - 1)$	9) $y = \sqrt{x}(4 - 3x)$	9) $y = \sqrt{x}(2x + 8)$
10) $y = x^9 \sin x$	10) $y = x^8 \cos x$	10) $y = x^9 \operatorname{ctgx}$	10) $y = x^3 \cos x$	10) $y = x^{11} \operatorname{tgx}$
11) $y = \left(\frac{9}{x} - 1\right)(5x + 2)$	11) $y = \left(\frac{6}{x} - 1\right)(2x + 6)$	11) $y = \left(\frac{2}{x} + 3\right)(5x + 7)$	11) $y = \left(\frac{5}{x} - 3\right)(x - 2)$	11) $y = \left(\frac{3}{x} + 5\right)(3x + 8)$
12) $y = \frac{3x^6}{2x - 5}$	12) $y = \frac{4x^6}{8x + 5}$	12) $y = \frac{2x^7}{4x - 5}$	12) $y = \frac{6x^3}{3x - 8}$	12) $y = \frac{4x^3}{3x - 9}$
13) $y = \frac{9\sqrt{x}}{x^5 - 6}$	13) $y = \frac{4\sqrt{x}}{10 + x^5}$	13) $y = \frac{2\sqrt{x}}{x^3 + 6}$	13) $y = \frac{\sqrt{x}}{x^6 + 3}$	13) $y = \frac{5\sqrt{x}}{x^7 - 1}$
14) $y = \frac{\operatorname{ctgx}}{4x^3}$	14) $y = \frac{7x}{\operatorname{tgx}}$	14) $y = \frac{2\operatorname{tgx}}{9x}$	14) $y = \frac{2 \sin x}{x^3}$	14) $y = \frac{\operatorname{ctgx}}{6x^2}$