

determinare le equazioni degli asintoti delle seguenti funzioni

1	$y = \frac{2x + 1}{x - 3}$	$x = 3, y = 2$
2	$y = \frac{3x + 4}{1 - x^2}$	$x = \pm 1, y = 0$
3	$y = \frac{2x^3}{x^3 - 8}$	$x = 2, y = 2$
4	$y = \frac{x^3 + 1}{2x^2 - 5}$	$x = \pm \frac{\sqrt{10}}{2}, y = \frac{1}{2}x$
5	$y = \frac{x^2 + 3}{x}$	$x = 0, y = x$
6	$y = \frac{3x^2 + x - 5}{x^2 - 4}$	$x = \pm 2, y = 3$
7	$y = \frac{x^2 - 9}{3x^2 - 9x + 9}$	$y = \frac{1}{3}$
8	$y = \frac{x^3}{x^2 - 4}$	$x = \pm 2, y = x$
9	$y = \frac{x^3 + 3x - 2}{x^2 - 9}$	$x = \pm 3, y = x$
10	$y = \frac{(x - 6)(x - 3)}{x(x - 8)(x - 4)}$	$x = 0, x = 8,$ $x = 4, y = 0$

11	$y = \frac{x^4 - 3}{x^3 - 2x^2 - 8x + 9}$	$x = 1, \quad x = \frac{1 \pm \sqrt{37}}{2},$ $y = x + 2$
12	$y = \frac{x}{\sqrt{2 + x^2}}$	$y = \pm 1$
13	$y = \frac{\sqrt{x^2 + 2x - 4}}{x + 1}$	$y = 1, \quad y = -1$
14	$y = x + \sqrt{x^2 + x}$	$y = 2x + \frac{1}{2}$
15	$y = 2x + \sqrt{x^2 - 1}$	$y = x, \quad y = 3x$
16	$y = \frac{- x }{x^2 +  x }$	$y = 0$
17	$y = \frac{3x -  x + 4  - 2}{4 -  1 - x^2 }$	$x = \pm\sqrt{5}, \quad y = 0$
18	$y = (x + 1) \left(\frac{1}{2}\right)^{(x+1)}$	$x = -1,$ $y = x + 1 - \ln 2$
19	$y = e^{\frac{x-1}{2x-3}}$	$x = \frac{3}{2}, \quad y = \sqrt{e}$
20	$y = xe^{\frac{1}{x}}$	$x = 0, \quad y = x + 1$

21	$y = e^{x^2-1}$	$y = 0$
22	$y = x^2 e^x$	$y = 0$
23	$y = \frac{2^x - 5}{4 - 3 \cdot 2^x}$	$x = \log_2 \frac{4}{3}, y = -\frac{5}{4},$ $y = -\frac{1}{3}$
24	$y = \ln \frac{x^2 - 3}{x^2 - 4}$	$x = \pm 2, y = 0$
25	$y = \frac{\ln x}{x^2}$	$x = 0, y = 0$
26	$y = \frac{1 + \ln x}{\ln x - 2}$	$x = e^2, y = 1$
27	$y = \frac{\ln x}{\sqrt{x}}$	$x = 0, y = 0$
28	$y = \ln \ln(3x - 2)$	$x = 1$
29	$y = \frac{\sin x}{x}$	$y = 0$
30	$y = \arctan \frac{2x}{x^2 - 1}$	$y = 0$
31	$y = \ln \arctan x$	$x = 0, y = \ln \frac{\pi}{2}$

32	$y = \arctan \ln x$	$y = \frac{\pi}{2}$
33	$y = \arcsin \frac{x^2 - 9}{x^2 - 4}$	$y = \frac{\pi}{2}$
34	$y = \arccos \frac{2x}{x^2 + 1}$	$y = \frac{\pi}{2}$