Codominio di una funzione

	calcola i codomini delle seguenti funzioni invertibili o invertibili a tratti	
1	$y = (x - 3/4)^2$	$\mathbb{R}^+$
2	$y = \sin^2 x$	$[0, 1]$
3	$y = \cos^3 x$	$[-1, 1]$
4	$y = x^2 - x + 1$	$[3/4, +\infty[$
5	$y = -2x^2 + 3x - 10$	$]-\infty, -71/8]$
6	$y = \sqrt[3]{7}\, x - \cos(\pi/7)$	$\mathbb{R}$
7	$y = (1 + \text{tg}^2 x)\cos^3 x$	$[-1, 1]$
8	$y = |x|$	$\mathbb{R}^+$
9	$y = |-x|$	$\mathbb{R}^+$
10	$y = -|x|$	$\mathbb{R}^-$
11	$y = \dfrac{x \sin\left(\frac{\pi}{3}\right) + \cos\left(\frac{\pi}{6}\right)}{\text{tg}\left(\frac{\pi}{9}\right)}$	$\mathbb{R}$
12	$y = \dfrac{2}{x - 2}$	$\mathbb{R} - \{0\}$
13	$y = \dfrac{3}{x} + x$	$]-\infty, -2\sqrt{3}] \cup [2\sqrt{3}, +\infty[$
14	$y = \dfrac{x - 3}{x + 3}$	$\mathbb{R} - \{1\}$
15	$y = \dfrac{2x + 5}{4}$	$\mathbb{R}$
16	$y = \dfrac{|2x| + 5}{4}$	$[5/4, +\infty[$
17	$y = e^{x^2 - 1}$	$[1/e, +\infty[$
18	$y = \ln(\ln(x))$	$\mathbb{R}$
19	$y = \ln(x^2 - 9) - \ln(x^2 + 9)$	$\mathbb{R}^-$
20	$y = (e^x)^{1/x^2}$	$\mathbb{R}^+ - \{1\}$

Codominio di una funzione

	calcola i codomini delle seguenti funzioni non invertibili	
21	$y = x \sin x$	$\mathbb{R}$
22	$y = |x| \sin^2 x$	$[0, +\infty[$
23	$y = 1 - e^{-1/x^2}$	$]0,1]$
24	$y = x^x$	$\left[\dfrac{1}{e^{1/e}}, +\infty\right[$
25	$y = \dfrac{\ln x}{x}$	$\left]-\infty, \dfrac{1}{e}\right]$
26	$y = \sin 3x \, \sin \pi x$	$]-1,1[$ [Attenzione agli estremi!]
27	$y = |x|(1 + \sqrt{\cos(2\pi x) - 1}\,)$	$\mathbb{N}$
28	$y = \text{arctg}\, x \, \sin x$	$\left]-\dfrac{\pi}{2}, \dfrac{\pi}{2}\right[$
29	$y = \text{arctg}\left(\dfrac{1}{x}\right) \text{arctg}\, x$	$[0, \dfrac{\pi^2}{16}]$
30	$y = \ln \dfrac{x}{|x|}$	$\{0\}$
31	$y = 6x^4 + 2x^3 - 6x^2 - 3x$	$[-\sqrt{2} - 3/2, +\infty[$
32	$y = \sqrt{3}\, x^3 - \sqrt{2}\, x^2 - x - 1$	$\mathbb{R}$
33	$y = \dfrac{1}{(x^2 + 1)\sin x}$	$\mathbb{R} - \{0\}$
34	$y = \dfrac{e^{-|x|}|x|}{x}$	$]-1,0[\cup]0,1[$
35	$y = \ln^2 x - \sqrt{\ln x}$	$\left[-\dfrac{3}{4\sqrt[3]{4}}, +\infty\right[$
36	$y = x + \sqrt{\sin \pi x} - \sqrt{|\sin \pi x|}$	$[2k, 2k + 1], \quad k \in \mathbb{Z}$
37	$y = \dfrac{|x|\sin \pi x}{|\sin \pi x|}$	$\mathbb{R} - (\mathbb{Z} - \{0\})$
38	$y = x^{\frac{1}{\log x}}$	$\{e\}$
39	$y = \sqrt{1 - x \ln x}$	$[0, \sqrt{1 + \dfrac{1}{e}}]$
40	$y = x(\sqrt{x + 1} + \sqrt{x - 1})$	$[2, +\infty[$