semplifica i seguenti radicali $(in\ R^+)$

1	$\sqrt{a^4b^8c^6}$	$a^2b^4c^3$
2	$\sqrt[3]{a^9b^6t^{12}}$	$a^3b^2t^4$
3	$\sqrt[24]{x^4z^{12}y^8}$	$\sqrt[6]{x\,z^3y^2}$
4	$\sqrt[10]{3^6\,2^4\,5^2}$	$\sqrt[5]{3^3\,2^2\,5}$
5	$\sqrt[12]{64\,a^6b^6}$	$\sqrt{2ab}$
6	$\sqrt[7]{x^{14}y^{42}z^{28}}$	$x^2y^6z^4$
7	$\sqrt[4]{9a^2-12ab+4b^2}$	$\sqrt{3a-2b}$
8	$\sqrt[6]{4x^4-20xy^3-20x^3y+33x^2y^2+4y^4}$	$\sqrt[3]{(x-2y)(y-2x)}$
9	$\sqrt[5a]{x^{25a^2}y^{10a^3}(x-y)^{15a}}$	$x^{5a}y^{2a^2}(x-y)^3$
10	$\sqrt[8]{\frac{16x^{20}y^{16}(x-y)^8}{81(a-c)^4}}$	$\sqrt{\frac{2x^5y^4(x-y)^2}{3(a-c)}}$
11	$\sqrt[x^2-y^2]{\frac{a^{2xy-y^2}}{b^{x-y}a^{x^2}}}$	$\sqrt[x+y]{\frac{1}{b\,a^{x-y}}}=\sqrt[x+y]{\frac{a^{y-x}}{b}}$
12	$\sqrt[9]{\frac{(x+1)^3}{8a^6b^3}}$	$\sqrt[3]{\frac{x+1}{2\,a^2\,b}}$
13	$\sqrt[n]{\frac{(a+2b)^{2n^2}}{(a-b)^{3n}\,c^{n^2+n}}}$	$\frac{(a+2b)^{2n}}{(a-b)^3\,c^{n+1}}$

14	$\sqrt[33]{\frac{(x+y)^{23}(x-y)^{12}}{(x^2-y^2)}}$			$\sqrt[3]{(x+y)^2\,(x-y)}$
riduci allo stesso indice i seguenti gruppo di radicali $(in\ R^+)$				
15	$\sqrt[3]{16}$	$\sqrt[2]{27}$	$\sqrt[4]{125}$	$\sqrt[12]{2^{16}}$ $\sqrt[12]{3^{18}}$ $\sqrt[12]{5^9}$
16	$\sqrt[5]{ab}$	$\sqrt[10]{a^3b^2}$	$\sqrt[15]{a^2b^3}$	$\sqrt[30]{a^6b^6}$ $\sqrt[30]{a^9b^6}$ $\sqrt[30]{a^4b^6}$
17	$\sqrt[2]{a^3+b^2}$	$\sqrt[12]{a^2-b^2}$	$\sqrt[6]{a^2-ab}$	$\sqrt[12]{(a^3+b^2)^6}$ $\sqrt[12]{a^2-b^2}$ $\sqrt[12]{(a^2-ab)^2}$
18	$\sqrt[n]{\frac{x+y}{xy^2}}$	$\sqrt[2n]{\frac{x^2+y^2}{xy}}$	$\sqrt[3n]{\frac{1+x}{x^2y}}$	$\sqrt[6n]{\frac{(x+y)^6}{x^6y^{12}}}$ $\sqrt[6n]{\frac{(x^2+y^2)^3}{x^3y^3}}$ $\sqrt[6n]{\frac{(1+x)^2}{x^4y^2}}$
19	$\sqrt[8]{\frac{(1-a)^2}{1+a}}$	$\sqrt[4]{\frac{a+1}{(a-1)^2}}$	$\sqrt[6]{\frac{(a-1)^2}{(a+1)^3}}$	$\sqrt[24]{\frac{(1-a)^6}{(1+a)^3}}$ $\sqrt[24]{\frac{(1+a)^6}{(a-1)^{12}}}$ $\sqrt[24]{\frac{(a-1)^8}{(a+1)^{12}}}$
trasporta i fattori fuori dal segno di radice $(in\ R^+)$				
20	$\sqrt[3]{a^4b^5c}$			$ab\sqrt[3]{a\,b^2c}$
21	$\sqrt[2]{\frac{8}{81}}$			$\frac{2}{9}\sqrt{2}$
22	$\sqrt{4x^4-4x^2}$			$2x\sqrt[2]{x^2-1}$
23	$\sqrt[5]{x^6y^8z^{11}t^{23}}$			$xy\,z^2t^4\sqrt[5]{x\,y^3z\,t^3}$
24	$\sqrt[3]{\frac{(e^3+3e^2+3e+1)\,i^7}{c^4t^2}}$			$\frac{(e+1)\,i^2}{c}\sqrt[3]{\frac{i}{c\,t^2}}$
25	$\sqrt[4]{\frac{64}{a^5b^6}-\frac{16}{a^7b^4}}$			$\frac{2}{ab}\sqrt[4]{\frac{4a^2-b^2}{a^3b^2}}$

26	$\frac{1}{2}\sqrt[4]{\frac{x^{36}\,y^{71}\,z^{25}}{64\,a^{19}\,b^{13}\,c^{50}}}$	$\frac{x^9y^{17}z^6}{4a^4b^3c^{12}}\sqrt[4]{\frac{y^3\,z}{4a^3b\,c^2}}$
27	$\sqrt[5]{\frac{n^3\,m^{10}\,l^8}{(l-1)^{20}}}$	$\frac{m^2\,l}{(l-1)^4}\sqrt[5]{n^3\,l^3}$
28	$\sqrt[3]{243x^7y^6-243x^8y^5}$	$3x^2y\sqrt[3]{9\,x\,y^2(y-x)}$
29	$\sqrt[2]{\frac{(a-b)^6\,a^8\,b^9}{32(2a-3b)^7}}$	$\frac{(a-b)^3a^4b^4}{4(2a-3b)^3}\sqrt{\frac{b}{2(2a-b)}}$
30	$\sqrt{\frac{a^3x^2+a^3y^2-2a^3x\,y}{4b^5x^2+4b^5y^2+8b^5x\,y}}$	$\frac{a(x-y)}{2b^2(x+y)}\sqrt{\frac{a}{b}}$
31	$\sqrt[5]{\frac{128\,a^{12}\,b^9}{c^{15}\,d^{17}}}$	$\frac{2a^2b}{c^3d^3}\sqrt[5]{\frac{4a^2b^4}{d^2}}$
32	$\sqrt[n]{2^{n+2}\,b^{n+1}\,a^{3n}}$	$2a^3b\sqrt[n]{4b}$
33	$\sqrt[t+1]{\frac{w^t\,k^{2t+2}\,s^{3t+3}}{5^{t+2}\,r^{t^2-1}}}$	$\frac{k^2\,s^3}{5\,r^{t-1}}\sqrt[t+1]{\frac{w^t}{5}}$
	trasporta i fattori sotto il segno di radice $(in\ R^+)$	
34	$\left(\frac{3}{2}-1\right)\sqrt{\frac{8}{5}}$	$\sqrt{\frac{2}{5}}$
35	$\frac{2}{3}\sqrt[3]{\frac{2}{3}}$	$\sqrt[3]{\frac{16}{81}}$
36	$x^2y^3\sqrt{x^3y^2}$	$\sqrt{x^7y^8}$
37	$\left(\sqrt{2}+\sqrt{3}\right)\sqrt{5-2\sqrt{6}}$	1

38	$(a-b)^2\,c^3\,\sqrt[5]{(a-b)c^2}$	$\sqrt[5]{(a-b)^{11}\,c^{17}}$
39	$\frac{a^2\,b}{c^3}\,\sqrt[4]{\frac{3a^2c^{11}}{b^4}}$	$\sqrt[4]{\frac{3a^{10}}{c}}$
40	$\frac{1}{(4-x)(y-3)}\,\sqrt{(x-4)(y-3)}$	$-\sqrt{\frac{1}{(x-4)(y-3)}}$
41	$a^{2n}\,b^{n+1}\,c\,\sqrt[3]{\frac{a^6c^n}{b^{3n}}}$	$\sqrt[3]{a^{6(n+1)}\,b^3c^{n+3}}$
42	$\frac{\pi}{e}\,\sqrt[n]{\frac{e^{n+1}}{\pi^{n-1}}}$	$\sqrt[n]{e\,\pi}$
43	$\frac{a^2-b^2}{x^2y^4-x^4y^2}\,\sqrt[3]{\frac{x^6y^8(y+x)^3}{(a-b)^4(a+b)^3}}$	$\sqrt[3]{\frac{y^2}{(a-b)(y-x)^3}}$
	esegui la potenza dei seguenti radicali $(in\ R^+)$	
44	$\left(\sqrt{a^2b^3\,c}\right)^3$	$a^3b^4c\,\sqrt{bc}$
45	$\left(\sqrt[3]{\frac{x^2\,y}{4}}\right)^2$	$\frac{x}{2}\,\sqrt[3]{\frac{x\,y^2}{2}}$
46	$\left(\frac{2}{5}\sqrt{\frac{75}{8}}\right)^4$	$\frac{9}{4}$
47	$\left(\sqrt[4]{\frac{27a^3b\,c^2}{x^4y^5}}\right)^2$	$\frac{3ac}{x^2y^2}\,\sqrt{\frac{3ab}{y}}$
48	$\left(\sqrt[5]{\frac{(7-y)}{2}}\right)^5$	$\frac{7-y}{2}$

49	$\left(\sqrt[mn]{6x^2\,y}\right)^{m^2}$	$\sqrt[n]{6^m\,x^{2m}\,y^m}$
50	$\left(\sqrt{x-y}\right)^3$	$(x-y)\sqrt{x-y}$
51	$\left(\sqrt[3]{1+ab}\right)^6$	$(1+ab)^2$
52	$\left(\sqrt[n]{5^{n-1}\,e}\right)^{2n}$	$e^2\,25^{n-1}$
53	$\left(\sqrt[10]{\frac{(x+y)^4}{(t-v)^3}}\right)^{15}$	$\frac{(x+y)^6}{(t-v)^4}\sqrt{\frac{1}{t-v}}$
54	$\left(\sqrt[4]{(2a-3)^2\,(2a+3)^3\,x^7\,y^5}\right)^{12}$	$(2a-3)^6(2a+3)^9x^{21}y^{15}$
55	$\left(\sqrt[3]{\frac{x^4y^2z^3}{(a-b)^4\,u^5}}\right)^4$	$\frac{x^5y^2z^4}{(a-b)^5u^6}\sqrt[3]{\frac{x\,y^2}{(a-b)u^2}}$
56	$\left(\sqrt{\sqrt{3}+\sqrt{5}}\right)^4$	$2\left(4+\sqrt{15}\right)$

riduci ad un'unica radice i seguenti radicali e trasporta fuori il segno di radice se possibile $(in\ R^+)$

57	$\sqrt[3]{\sqrt{2a}}$	$\sqrt[6]{2a}$
58	$\sqrt[4]{\sqrt[3]{\frac{5xy}{z}}}$	$\sqrt[12]{\frac{5xy}{z}}$
59	$\sqrt[5]{\sqrt[3]{25(x+z)}}$	$\sqrt[15]{25(x+z)}$
60	$\sqrt[3]{\sqrt[4]{x^{17}y^{36}}}$	$xy^3\sqrt[12]{x^5}$

61	$\sqrt{\frac{1}{2}\sqrt[3]{4\sqrt{\frac{1}{4}}}}$	$\sqrt[3]{\frac{1}{2}}$
62	$\sqrt{\sqrt{a^8b^7c^6}}$	$a^2b\,c\sqrt[4]{b^3c^2}$
63	$\sqrt[5]{z^2\sqrt[7]{z^3}}$	$\sqrt[35]{z^{17}}$
64	$\sqrt{a^2b^3\sqrt[3]{a^3b^2}}$	$ab\sqrt[6]{a^3b^5}$
65	$\sqrt[3]{\sqrt{x}}$	$\sqrt[6]{x}$
66	$\sqrt[5]{x\sqrt{x}}$	$\sqrt[10]{x^3}$
67	$\sqrt[4]{\frac{a-b}{bc}\sqrt{\frac{b^3c}{a-b}}}$	$\sqrt[8]{\frac{b(a-b)}{c}}$
68	$\sqrt{x^2y^2\sqrt{\frac{1}{x^2y^2}\sqrt{xy}}}$	$\sqrt[8]{x^5y^5}$
69	$\sqrt[3]{(x+y)\sqrt[3]{\frac{(x-y)}{(x+y)^2}}};$	$\sqrt[9]{x^2-y^2}$
70	$\sqrt[n+1]{\sqrt[n-1]{a^{n^2-1}}}$	a
71	$\sqrt[3]{(a+b)^2\sqrt{(a+b)\sqrt[3]{(a+b)}}}$	$\sqrt[9]{(a+b)^8}$

esegui la somma algebrica dei radicali $(in\ R^+)$		
72	$3\sqrt{5}-2\sqrt{5}-5\sqrt{5}+10\sqrt{2}$	$-4\sqrt{5}+10\sqrt{2}$
73	$3\sqrt{2}-6(\sqrt{2}+\sqrt{3})+5\sqrt{3}$	$-(3\sqrt{2}+\sqrt{3})$
74	$2(\sqrt{5}+\sqrt{3})-8\sqrt{5}-2\sqrt{3}+7\sqrt{5}$	$\sqrt{5}$
75	$3\sqrt{2}+4\sqrt{8}-\sqrt{50}$	$6\sqrt{2}$
76	$2\sqrt{27}-5\sqrt{48}+3\sqrt{75}$	$\sqrt{3}$
77	$3\sqrt{75}+2\sqrt{12}-3\sqrt{48}-7\sqrt{3}$	0
78	$2\sqrt{63}+4\sqrt{12}-2\sqrt{28}-\sqrt{27}$	$2\sqrt{7}+5\sqrt{3}$
79	$\frac{3}{4}\sqrt{\frac{45}{2}}+\frac{1}{3}\sqrt{\frac{125}{2}}-\frac{2}{5}\sqrt{\frac{490}{4}}$	$\frac{67}{60}\sqrt{\frac{5}{2}}$
80	$\sqrt[3]{16}+\sqrt[3]{54}-\sqrt[3]{250}$	0
81	$\sqrt[3]{128}+\sqrt[3]{16}-3\sqrt[3]{250}-\sqrt[3]{54}$	$-12\sqrt[3]{2}$
82	$\sqrt{72}-\sqrt{18}+\sqrt{12}-\sqrt{48}+\sqrt{2}$	$2(2\sqrt{2}-\sqrt{3})$
83	$\sqrt[3]{243}-2\sqrt{125}-\sqrt[3]{72}+3\sqrt{45}+2\sqrt[3]{9}-\sqrt{20}$	$3\sqrt[3]{9}-3\sqrt{5}$
84	$\frac{3}{4}\sqrt[3]{\frac{1}{2}}+\frac{1}{2}\sqrt[3]{\frac{54}{4}}-\frac{2}{5}\sqrt[3]{\frac{125}{16}}$	$\frac{5}{4}\sqrt[3]{\frac{1}{2}}$

85	$\frac{1}{2}\sqrt[3]{a^2b}+3\sqrt[3]{a^5b}-\frac{1}{3}\sqrt[3]{a^5b}-\frac{3}{4}\sqrt[6]{a^4b^2}$	$\frac{8}{3}a\sqrt[3]{a^2b}-\frac{1}{4}\sqrt[3]{a^2b}$
86	$2\sqrt{a}+\frac{1}{2}(\sqrt{a}-\sqrt{b})+4(\sqrt{b}+2\sqrt{a})+\frac{3}{2}(\sqrt{a}+\sqrt{b})$	$12\sqrt{a}+5\sqrt{b}$
87	$5\sqrt[3]{a-b}+(x-2)\sqrt[5]{a+b}+4(\sqrt{ab}-\sqrt[3]{a-b})-4\sqrt{ab}+2\sqrt[5]{a+b}$	$\sqrt[3]{a-b}+x\sqrt[5]{a+b}$
88	$5\left(\sqrt{ab^2}-\sqrt[3]{a^2b}\right)-8\sqrt{ab^2}+3-6\left(\sqrt[3]{a^2b}+1+\sqrt{a}\right)+3\sqrt{a}$	$-3\left(\sqrt{ab^2}+\sqrt{a}+1\right)-11\sqrt[3]{a^2b}$
89	$\sqrt{a^3+3a^2b+3ab^2+b^3}-\sqrt{a^3+a^2b}+\frac{1}{2}\sqrt{4ab^2+4b^3}-2b\sqrt[4]{a^2+2ab+b^2}$	0
90	$2a-\frac{1}{2}\sqrt[3]{128a^5}-\frac{2}{3}\sqrt[3]{27a^3}+\sqrt[3]{2a^2}+\sqrt[3]{54a^2x^3}+\sqrt[3]{16a^5}$	$(1+3x)\sqrt[3]{2a^2}$
	sviluppa i seguenti prodotti notevoli tra radicali $(in\ R^+)$	
91	$(\sqrt{7}-2)(\sqrt{7}+2)$	3
92	$(3\sqrt{5}-4\sqrt{2})(3\sqrt{5}+4\sqrt{2})$	13
93	$\left(\sqrt{a}+2\sqrt{b}\right)^2$	$a+4b+4\sqrt{ab}$
94	$\left(\sqrt{11}-\sqrt{3}\right)^2$	$2(7-\sqrt{33})$
95	$\left(\sqrt{x}+\frac{1}{\sqrt{x}}\right)^2$	$\frac{(x+1)^2}{x}$
96	$\left(\sqrt[4]{x}-3\sqrt[6]{y}\right)^2$	$\sqrt{x}+9\sqrt[3]{y}-6\sqrt[12]{x^3y^2}$
97	$\left(3+\sqrt{5}\right)^2$	$14+6\sqrt{5}$
98	$\left(\sqrt{7}-2\sqrt{3}\right)^2$	$19-4\sqrt{21}$

99	$(a\sqrt{b}-c\sqrt{d})(a\sqrt{b}+c\sqrt{d})$	$a^2\,b-c^2\,d$
100	$\left(\frac{1}{2}\sqrt{2x}-\frac{2}{3}\sqrt{x}\right)\left(\frac{1}{2}\sqrt{2x}+\frac{2}{3}\sqrt{x}\right)$	$\frac{x}{18}$
101	$\left(\sqrt{5}-\sqrt{3}+\sqrt{2}\right)^2$	$10-2\sqrt{15}+2\sqrt{10}-2\sqrt{6}$
102	$\left(\sqrt{x}+3\right)^3$	$x\sqrt{x}+27+9x+27\sqrt{x}$
103	$\left(2\sqrt[3]{a}-3\sqrt[6]{b}\right)^3$	$8a-27\sqrt{b}-36\sqrt[6]{a^4b}+54\sqrt[3]{ab}$
	razionalizza i denominatori delle seguenti frazioni $(in\ R^+)$	
104	$\frac{2}{\sqrt{2}}$	$\sqrt{2}$
105	$\frac{1}{\sqrt{5}}$	$\frac{\sqrt{5}}{5}$
106	$\frac{2}{\sqrt{12}}$	$\frac{\sqrt{3}}{3}$
107	$\frac{2\sqrt{7}}{\sqrt{20}}$	$\frac{\sqrt{35}}{5}$
108	$\frac{2\sqrt{3}}{\sqrt{18}}$	$\frac{\sqrt{6}}{3}$
109	$\frac{8\sqrt{5}}{3\sqrt{28}}$	$\frac{4\sqrt{35}}{21}$
110	$\frac{2\sqrt{15}}{3\sqrt{75}}$	$\frac{2\sqrt{5}}{15}$
111	$\frac{\sqrt[3]{3}}{\sqrt{5}}$	$\frac{\sqrt[6]{1125}}{5}$
112	$\frac{\sqrt{5}-\sqrt{3}}{3\sqrt{2}}$	$\frac{\sqrt{10}-\sqrt{6}}{6}$

113	$\frac{2\sqrt{2}-3\sqrt{5}}{2\sqrt{3}}$	$\frac{2\sqrt{6}-3\sqrt{15}}{6}$
114	$\frac{2\sqrt{40}-3\sqrt{8}-\sqrt{5}}{6\sqrt{12}}$	$\frac{\sqrt{3}(4\sqrt{10}-6\sqrt{2}-\sqrt{5})}{36}$
115	$\frac{\sqrt{50}+\sqrt{12}-3\sqrt{2}}{4\sqrt{8}}$	$\frac{\sqrt{2}(\sqrt{3}+\sqrt{2})}{8}$
116	$\frac{a}{2\sqrt{a}}$	$\frac{\sqrt{a}}{2}$
117	$\frac{a^2-b^2}{\sqrt{a+b}}$	$(a-b)\sqrt{a+b}$
118	$\frac{4a\sqrt[3]{ab}}{\sqrt{b}}$	$\frac{4a\sqrt[6]{a^2b^5}}{b}$
119	$\frac{a+5}{\sqrt{a+5}}$	$\sqrt{a+5}$
120	$\frac{\sqrt{x}-\sqrt{y}}{\sqrt{y}}$	$\frac{\sqrt{xy}}{y}-1$
121	$\frac{x-y}{\sqrt{x^2-y^2}}$	$\frac{\sqrt{x^2-y^2}}{x+y}$
122	$\frac{x^2+2x+1}{\sqrt{x+1}}$	$(x+1)\sqrt{x+1}$
123	$\frac{x^3-8}{\sqrt{x-2}}$	$(x^2+2x+4)\sqrt{x-2}$
124	$\frac{3}{\sqrt{a^3}}$	$\frac{3\sqrt{a}}{a^2}$
125	$\frac{2}{\sqrt[3]{4}}$	$\sqrt[3]{2}$
126	$\frac{2}{3\sqrt[5]{8}}$	$\frac{\sqrt[5]{4}}{3}$

127	$\frac{\sqrt{x^3}\ \sqrt[14]{x^5}}{x\sqrt[7]{x^6}}$	1
128	$\frac{4\sqrt{3}}{\sqrt[7]{9}}$	$4\sqrt[14]{27}$
129	$\frac{3\sqrt{2}}{4\sqrt[3]{2}}$	$\frac{3\sqrt[6]{2}}{4}$
130	$\frac{12}{7\sqrt[6]{18}}$	$\frac{2\sqrt[6]{2592}}{7}$
131	$\frac{x}{\sqrt[4]{xy}}$	$\frac{\sqrt[4]{x^3y^3}}{y}$
132	$\frac{6}{5\sqrt[3]{a^2b}}$	$\frac{6\sqrt[3]{ab^2}}{5ab}$
133	$\frac{8abc}{3\sqrt[4]{a^3b^2c}}$	$\frac{8\sqrt[4]{ab^2c^3}}{3}$
134	$\frac{xy^3z}{\sqrt[5]{x^2y^7z}}$	$y\sqrt[5]{x^3y^3z^4}$
135	$\frac{3ax}{2b\sqrt[5]{a^3x}}$	$\frac{3\sqrt[5]{a^2x^4}}{2b}$
136	$\frac{a^2bxy^3}{\sqrt[6]{a^5x\,y^5}}$	$aby^2\sqrt[6]{ax^5y}$
137	$\frac{b}{y\sqrt[5]{b^3}}$	$\frac{\sqrt[5]{b^2}}{y}$
138	$\frac{4xy-4y^2}{2\sqrt[3]{x^2-2xy+y^2}}$	$2y\sqrt[3]{x-y}$
139	$\frac{a^2b}{x\sqrt[3]{axb}}$	$\frac{a\sqrt[3]{a^2x^2b^2}}{x^2}$
140	$\frac{4x^2y\,(x-y)}{\sqrt[3]{16x^4y^2(x-y)^2}}$	$\sqrt[3]{4x^2\,y\,(x-y)}$

141	$\dfrac{x^3-y^3}{(x^2+xy+y^2)\sqrt[4]{x-y}}$	$\sqrt[4]{(x-y)^3}$
142	$\dfrac{a+b}{\sqrt[5]{a^2+2ab+b^2}}$	$\sqrt[5]{(a+b)^3}$
143	$\dfrac{(x+y)^2}{\sqrt[4]{x+y}}$	$(x+y)\sqrt[4]{(x+y)^3}$
144	$\dfrac{a^2-1}{\sqrt[3]{(a^2-2a+1)^2}}$	$\dfrac{(a+1)\sqrt[3]{(a-1)^2}}{a-1}$
145	$\dfrac{a^2-b^2}{\sqrt[3]{a+b}}$	$(a-b)\sqrt[3]{(a+b)^2}$
146	$\dfrac{\sqrt{xy}+\sqrt[3]{xy^2}}{\sqrt[3]{x}\sqrt{y}}$	$\sqrt[6]{x}+\sqrt[6]{y}$
147	$\dfrac{2}{\sqrt{3}+\sqrt{2}}$	$2(\sqrt{3}-\sqrt{2})$
148	$\dfrac{5}{4-\sqrt{5}}$	$\dfrac{5(4+\sqrt{5})}{11}$
149	$\dfrac{6}{2+\sqrt{2}}$	$3(2-\sqrt{2})$
150	$\dfrac{6}{\sqrt{6}-\sqrt{2}}$	$\dfrac{3\sqrt{2}(\sqrt{3}+1)}{2}$
151	$\dfrac{3\sqrt{3}}{\sqrt{3}-3}$	$-\dfrac{3(\sqrt{3}+1)}{2}$
152	$\dfrac{\sqrt{7}+2}{\sqrt{7}-2}$	$\dfrac{11+4\sqrt{7}}{3}$
153	$\dfrac{a-b}{b-\sqrt{ab}}$	$-\dfrac{b+\sqrt{ab}}{b}$
154	$\dfrac{\sqrt{a}-a\sqrt{a}}{1-\sqrt{a}}$	$\sqrt{a}+a$

155	$\frac{12}{\sqrt{3}-\sqrt{2}}$	$12(\sqrt{3}+\sqrt{2})$
156	$\frac{\sqrt{7}+2\sqrt{3}}{19+4\sqrt{21}}$	$\frac{2\sqrt{3}-\sqrt{7}}{5}$
157	$\frac{\sqrt{a}-\sqrt{2}}{\sqrt{a}+\sqrt{2}}$	$\frac{a+2-2\sqrt{2a}}{a-2}$
158	$\frac{a-b}{\sqrt{a}-\sqrt{b}}$	$\sqrt{a}+\sqrt{b}$
159	$\frac{\sqrt{x}-\sqrt{y}}{\sqrt{x}+\sqrt{y}}$	$\frac{x+y-2\sqrt{xy}}{x-y}$
160	$\frac{8}{\sqrt{2a}+2b}$	$\frac{4(\sqrt{2a}-2b)}{a-2b^2}$
161	$\frac{\sqrt{x}}{\sqrt{x}-2\sqrt{y}}$	$\frac{x+2\sqrt{xy}}{x-4y}$
162	$\frac{a-2}{2\sqrt{a}-a\sqrt{2}}$	$-\frac{2\sqrt{a}+a\sqrt{2}}{2a}$
163	$\frac{a+2\sqrt{ab}+b}{\sqrt{a}+\sqrt{b}}$	$\sqrt{a}+\sqrt{b}$
164	$\frac{a-5\sqrt{a}+b}{\sqrt{a}-2}$	$\frac{\sqrt{a}(a-10+b)-3a+2b}{a-4}$
165	$\frac{3ab}{\sqrt{3a}-\sqrt{ab}}$	$\frac{3b(\sqrt{3a}+\sqrt{ab})}{3-b}$
166	$\frac{x^2-2xy+y^2}{\sqrt{x}-\sqrt{y}}$	$(x-y)(\sqrt{x}+\sqrt{y})$
167	$\frac{ab}{(\sqrt{a-b}+\sqrt{a+b})}$	$\frac{-a(\sqrt{a-b}-\sqrt{a+b})}{2}$
168	$\frac{\sqrt{a+b}+\sqrt{a-b}}{\sqrt{a+b}-\sqrt{a-b}}$	$\frac{a+\sqrt{a^2-b^2}}{b}$

169	$\frac{a+3+2\sqrt{a+2}}{\sqrt{a+2}+1}$	$1+\sqrt{a+2}$
170	$\frac{a+1}{\sqrt{a+4}-\sqrt{3}}$	$\sqrt{a+4}+\sqrt{3}$
171	$\frac{3b+3}{\sqrt{2b+3}-\sqrt{b+2}}$	$3\left(\sqrt{2b+3}+\sqrt{b+2}\right)$
172	$\frac{\sqrt{ab}}{\sqrt{a^2b^3}+\sqrt{a^5b}}$	$\frac{b\sqrt{a}-a^2}{(b^2-a^3)a}$
173	$\frac{3\sqrt{3}}{2-\sqrt{2}+\sqrt{3}}$	$\frac{-36\sqrt{2}-15\sqrt{6}-27+6\sqrt{3}}{23}$
174	$\frac{23\sqrt{6}}{\sqrt{3}-\sqrt{2}-2}$	$9\sqrt{2}-10\sqrt{3}-2\sqrt{6}-24$
175	$\frac{3\sqrt{3}}{2-\sqrt{2}+\sqrt{3}}$	$\frac{36\sqrt{2}-15\sqrt{6}+27+6\sqrt{3}}{23}$
176	$\frac{1-\sqrt{2}}{\sqrt{2}-\sqrt{3}-\sqrt{5}}$	$\frac{2\sqrt{15}-6-\sqrt{30}+3\sqrt{2}-2\sqrt{3}+2\sqrt{6}}{12}$
177	$\frac{1}{\sqrt{3}+\sqrt{5}-\sqrt{2}}$	$\frac{\sqrt{30}-3\sqrt{2}+2\sqrt{3}}{12}$
178	$\frac{4}{\sqrt{2}-\sqrt{3}-\sqrt{6}}$	$\frac{4\left(7\sqrt{2}-5\sqrt{3}+\sqrt{6}-12\right)}{23}$
179	$\frac{3}{\sqrt{7}-\sqrt{2}+\sqrt{3}}$	$\frac{3\left(\sqrt{42}-4\sqrt{2}+3\sqrt{3}-\sqrt{7}\right)}{10}$
180	$\frac{2\sqrt{2}-\sqrt{3}}{\sqrt{2}-\sqrt{3}+\sqrt{6}}$	$-\frac{17\sqrt{6}-27\sqrt{2}+16\sqrt{3}-43}{23}$
181	$\frac{15\sqrt{2}}{\sqrt{6}+\sqrt{2}-2\sqrt{3}}$	$\frac{15\left(4+2\sqrt{3}+\sqrt{6}+3\sqrt{2}\right)}{4}$
182	$\frac{2}{\sqrt{3}+\sqrt{5}-\sqrt{2}}$	$\frac{2\sqrt{3}-3\sqrt{2}+\sqrt{30}}{6}$

183	$\frac{\sqrt{2}-\sqrt{3}+1}{\sqrt{3}+1+\sqrt{6}}$	$\sqrt{2}-\sqrt{3}+\sqrt{6}-2$
184	$\frac{2\sqrt{2}+3}{\sqrt{6}+\sqrt{3}+\sqrt{2}+2}$	$\sqrt{6}+\sqrt{3}-\sqrt{2}-2$
185	$\frac{1}{\sqrt{6}-\sqrt{2}+\sqrt{3}-1}$	$\frac{\sqrt{6}-\sqrt{3}+\sqrt{2}-1}{2}$
186	$\frac{\sqrt{3}}{2-\sqrt{6}-\sqrt{2}+\sqrt{3}}$	$-3\sqrt{2}-2\sqrt{3}-\sqrt{6}-3$
187	$\frac{1}{\sqrt[3]{3}-2}$	$-\frac{\sqrt[3]{9}+2\sqrt[3]{3}+4}{5}$
188	$\frac{\sqrt[3]{2}}{\sqrt[3]{2}-1}$	$(1+\sqrt[3]{4}+\sqrt[3]{2})\sqrt[3]{2}$
189	$\frac{3}{\sqrt[3]{5}-\sqrt[3]{2}}$	$\sqrt[3]{25}+\sqrt[3]{10}+\sqrt[3]{4}$
190	$\frac{a+b^3}{\sqrt[3]{a}+b}$	$\sqrt[3]{a^2}-b\sqrt[3]{a}+b^2$
191	$\frac{3\sqrt[3]{2}}{\sqrt[3]{2}-1}$	$3(2+\sqrt[3]{4}+\sqrt[3]{2})$
192	$\frac{6}{\sqrt[3]{3}-\sqrt[3]{2}}$	$6(\sqrt[3]{9}+\sqrt[3]{6}+\sqrt[3]{4})$
193	$\frac{13}{2-\sqrt[4]{3}}$	$(2+\sqrt[4]{3})(4+\sqrt{3})$
194	$\frac{10}{2\sqrt[3]{2}-\sqrt[3]{6}}$	$4\sqrt[3]{4}+2\sqrt[3]{12}+\sqrt[3]{36}$
195	$\frac{19}{2\sqrt[3]{3}-\sqrt[3]{5}}$	$4\sqrt[3]{9}+2\sqrt[3]{15}+\sqrt[3]{25}$
196	$\frac{13}{2\sqrt[3]{3}+\sqrt[3]{2}}$	$\frac{4\sqrt[3]{9}-2\sqrt[3]{6}+\sqrt[3]{4}}{2}$

197	$\dfrac{y}{\sqrt[3]{x+y}-\sqrt[3]{x}}$	$\sqrt[3]{(x+y)^2}+\sqrt[3]{x^2+xy}+\sqrt[3]{x^2}$
198	$\dfrac{2x}{\sqrt[3]{x+y}+\sqrt[3]{x-y}}$	$\sqrt[3]{(x+y)^2}-\sqrt[3]{x^2-y^2}+\sqrt[3]{(x-y)^2}$
199	$\dfrac{5x}{\sqrt[3]{5x+2}-\sqrt[3]{2}}$	$\sqrt[3]{(5x+2)^2}+\sqrt[3]{10x+4}+\sqrt[3]{4}$

trasforma i seguenti radicali doppi in somma di semplici radicali

200	$\sqrt{4-\sqrt{7}}$	$\sqrt{\frac{7}{2}}-\sqrt{\frac{1}{2}}$
201	$\sqrt{3+\sqrt{5}}$	$\sqrt{\frac{5}{2}}+\sqrt{\frac{1}{2}}$
202	$\sqrt{9-\sqrt{17}}$	$\sqrt{\frac{17}{2}}-\sqrt{\frac{1}{2}}$
203	$\sqrt{10+\sqrt{19}}$	$\sqrt{\frac{19}{2}}+\sqrt{\frac{1}{2}}$
204	$\sqrt{4-\sqrt{12}}$	$\sqrt{3}-1$
205	$\sqrt{8+\sqrt{48}}$	$\sqrt{6}+\sqrt{2}$
206	$\sqrt{5-2\sqrt{6}}$	$\sqrt{3}-\sqrt{2}$
207	$\sqrt{8-2\sqrt{15}}$	$\sqrt{5}-\sqrt{3}$
208	$\sqrt{4+2\sqrt{3}}$	$\sqrt{3}+1$
209	$\sqrt{12-2\sqrt{11}}$	$\sqrt{11}-1$
210	$\sqrt{20+\sqrt{279}}$	$\frac{\sqrt{62}}{2}+\frac{3\sqrt{2}}{2}$

211	$\sqrt{13-4\sqrt{3}}$		$2\sqrt{3}-1$
212	$\sqrt{18+3\sqrt{11}}$		$\frac{\sqrt{66}}{2}+\frac{\sqrt{6}}{2}$
213	$\sqrt{\frac{7}{6}-\frac{2}{\sqrt{3}}}$		$\frac{\sqrt{6}}{3}-\frac{\sqrt{2}}{2}$
214	$\sqrt{\frac{6}{5}-\sqrt{\frac{4}{5}}}$		$1-\frac{\sqrt{5}}{5}$
215	$\sqrt{4\sqrt{2}-2\sqrt{6}}$		$\sqrt[4]{18}-\sqrt[4]{2}$
216	$\sqrt{a+3+2\sqrt{3a}}$	$(a>0)$	$\sqrt{a}+\sqrt{3}$
217	$\sqrt{x-\sqrt{2x-1}}$	$\left(x>\frac{1}{2}\right)$	$\frac{\sqrt{2(2x-1)}}{2}-\frac{\sqrt{2}}{2}$
218	$\sqrt{(a+b)+2\sqrt{ab}}$	$(a,b\in N)$	$\sqrt{a}+\sqrt{b}$
219	$\sqrt{x+y-2\sqrt{xy}}$	$(x,y\in R^+)$	$\sqrt{x}-\sqrt{y}$

calcola il valore delle seguenti espressioni con i radicali $(in\ R^+)$

220	$\sqrt[3]{2}\cdot\sqrt{3}\cdot\sqrt[3]{6}\cdot\sqrt[12]{6}$	$\sqrt[12]{2^9\cdot 3^{11}}$
221	$\sqrt{72}:\sqrt{6}:\sqrt{2}$	$\sqrt{6}$
222	$\sqrt{6}:\sqrt[4]{12}$	$\sqrt[4]{3}$
223	$\frac{6}{\sqrt{3}}+\frac{5}{\sqrt{5}}$	$2\sqrt{3}+\sqrt{5}$

224	$\sqrt{\frac{5}{2}} : \sqrt{\frac{10}{27}} : \sqrt{\frac{3}{8}}$	$3\sqrt{2}$
225	$\sqrt[3]{a^2bc} \cdot \sqrt[3]{a^2b^2c^2}$	$abc\sqrt[3]{a}$
226	$\sqrt{a} : \sqrt[3]{a}$	$\sqrt[6]{a}$
227	$\sqrt[4]{a^3x^2y} : \sqrt[5]{a^2x^2y}$	$\sqrt[20]{a^7x^2y}$
228	$\left(2\sqrt{5} - 5\sqrt{2}\right)^2$	$10\left(7 - 2\sqrt{10}\right)$
229	$\sqrt{\frac{2}{\sqrt{5} - \sqrt{3}}}$	$\sqrt{\sqrt{5} + \sqrt{3}}$
230	$\sqrt{3 - \sqrt{5}} \cdot \sqrt{3 + \sqrt{5}} \cdot \sqrt{6 - 4\sqrt{2}} \cdot \sqrt{6 + 4\sqrt{2}}$	4
231	$\frac{1}{3 + \sqrt{3}} - \frac{1}{3 - \sqrt{3}} - \sqrt{3}$	$-\frac{4\sqrt{3}}{3}$
232	$\frac{\sqrt{2}}{1 - \sqrt{5}} + \frac{\sqrt{2} - 3}{\sqrt{5}} - \frac{3\left(\sqrt{5} - 1\right)}{\sqrt{5} - 5}$	$-\frac{\sqrt{2}(\sqrt{5} + 5)}{20}$
233	$\frac{3}{2 + \sqrt{3}} + \frac{3}{2 - \sqrt{3}} - 5$	7
234	$\left(1 + 2\sqrt{2} - 3\sqrt{3}\right)^2 - \left(1 - \sqrt{2}\right)^3$	$29 + 9\sqrt{2} - 6\sqrt{3} - 12\sqrt{6}$
235	$\frac{4 - \sqrt{5} - \left(2 + \sqrt{5}\right) - \left(2 - \sqrt{5}\right)}{\sqrt{5}\left(2 - \sqrt{5}\right)\left(2 + \sqrt{5}\right)}$	1
236	$\left(\sqrt{5} - \sqrt{3}\right) \cdot \sqrt{4 + \sqrt{15}}$	$\sqrt{2}$

237	$\sqrt{7+2\sqrt{10}}-\sqrt{7-2\sqrt{10}}$	$2\sqrt{2}$
238	$\frac{3}{4\sqrt{10}}\cdot\left(\frac{\sqrt{5}+\sqrt{2}}{\sqrt{5}-\sqrt{2}}-\frac{\sqrt{5}-\sqrt{2}}{\sqrt{5}+\sqrt{2}}\right):\sqrt{17^2-15^2}+1$	$\frac{9}{4}$
239	$\left[\left(1+\frac{\sqrt{3}}{2}\right)\cdot\left(2-\frac{7}{2+\sqrt{3}}\right):\left(1-\frac{2}{2+\sqrt{3}}\right)\right]:\frac{1}{2\sqrt{3}}$	$\frac{\sqrt{3}}{3}$
240	$\frac{1}{\sqrt{5}+\sqrt{3}}+\frac{1}{\sqrt{5}-\sqrt{3}}-\frac{3}{2}\sqrt{\frac{20}{9}}$	0
241	$\frac{-2\sqrt{2}}{(2+\sqrt{6})-(\sqrt{2}+2\sqrt{3})}$	$\sqrt{6}+\sqrt{3}+\sqrt{2}+1$
242	$\left(\frac{\sqrt{2}}{\sqrt{3}}+\frac{\sqrt{3}}{\sqrt{2}}\right)\cdot\left(\frac{\sqrt{3}}{\sqrt{5}}+\frac{\sqrt{5}}{\sqrt{3}}\right)$	$\frac{4}{3}\sqrt{10}$
243	$\left(\frac{1}{\sqrt[3]{3}}+\frac{1}{\sqrt[3]{9}}\right)\cdot\frac{6}{\sqrt[3]{3}+\sqrt[3]{9}}$	2
244	$\frac{1}{2\sqrt{5}}\cdot\left(\frac{\sqrt{5}}{\sqrt[3]{3}}-\frac{\sqrt[3]{9}}{\sqrt{5}}\right)$	$\frac{\sqrt[3]{9}}{15}$
245	$\sqrt{\frac{2\sqrt{3}-3}{\sqrt{3}}}\cdot(2-\sqrt{3})\cdot(2+\sqrt{3})$	$\frac{\sqrt{6}-\sqrt{2}}{2}$
246	$\frac{\sqrt{2-\sqrt{2}}}{\sqrt{2+\sqrt{2}}}\cdot\frac{\sqrt{3+\sqrt{7}}}{\sqrt{3-\sqrt{7}}}\cdot(3-\sqrt{7})$	$2-\sqrt{2}$
247	$\frac{\sqrt{a}}{\sqrt{a}+\sqrt{b}}+\frac{\sqrt{b}}{\sqrt{a}-\sqrt{b}}-\frac{2a}{a-b}$	-1
248	$(3\sqrt{x}-2\sqrt{y})\cdot(\sqrt{x}+\sqrt{y}+1)-(\sqrt{x}-2)\cdot(2\sqrt{x}+\sqrt{y})$	$x-2y+7\sqrt{x}$
249	$\sqrt{\frac{a^6\sqrt{b}}{b\sqrt[3]{a}}}$	$a^2\sqrt[12]{\frac{a^{10}}{b^3}}$

250	$\sqrt{a^3b}\cdot\sqrt{a^5b^7}$	a^4b^4
251	$\sqrt{x^2-1}:\sqrt{x+1}$	$\sqrt{x-1}$
252	$\frac{\sqrt{b}}{\sqrt{a}+\sqrt{b}}-\frac{\sqrt{b}}{\sqrt{a}-\sqrt{b}}+\frac{2a}{a-b}$	2
253	$\left(\sqrt{2-x}-\sqrt{2+x}\right)^2+\left(\sqrt{4-x^2}+1\right)^2$	$9-x^2$
254	$\left(\frac{\sqrt{a}}{\sqrt{b}}+\frac{\sqrt{b}}{\sqrt{a}}\right)\cdot\left(\frac{1}{\sqrt{a}}+\frac{1}{\sqrt{b}}\right)$	$\frac{(a+b)(\sqrt{a}+\sqrt{b})}{ab}$
255	$\frac{\sqrt{a+b}}{2\sqrt{a-b}}+\frac{\sqrt{a-b}}{3\sqrt{a+b}}-\frac{\sqrt{a+b}}{\sqrt{a-b}}$	$-\frac{a+5b}{6\sqrt{a^2-b^2}}$
256	$\left(\sqrt{x}-\sqrt{y}\right)^2-(\sqrt{x}-1)(\sqrt{x}-\sqrt{y})+(\sqrt{y}+2)(\sqrt{x}+1)-3(y+\sqrt{x})$	$2(1-y)$
257	$\frac{a-1}{a\sqrt{a}+1}\cdot\left(a+\frac{1+a}{a}\right)$	$\frac{a\sqrt{a}-1}{a}$
258	$\sqrt{27x^3y}+x\sqrt{12xy}-\sqrt[6]{27x^3y^3}-4x\sqrt{3xy}+\sqrt[4]{9x^2y^2}$	$x\sqrt{3xy}$
259	$\left(2\sqrt{a}+3\sqrt{b}\right):\left(2\sqrt{a}-3\sqrt{b}\right)-\left(12\sqrt{ab}+18b\right):(4a-9b)$	1
260	$\frac{\sqrt[4]{a}}{\sqrt[4]{a}-1}+\frac{\sqrt[4]{a}}{\sqrt[4]{a}+1}-\frac{\sqrt{a}+1}{\sqrt{a}-1}$	1
261	$\frac{x^2-y^2}{\sqrt[3]{x^2}+\sqrt[3]{xy}+\sqrt[3]{y^2}}$	$(x+y)\left(\sqrt[3]{x}-\sqrt[3]{y}\right)$
262	$\sqrt{\frac{a+\sqrt{b}}{a-\sqrt{b}}}\cdot\sqrt{a^2-b}$	$a+\sqrt{b}$
263	$\left(\sqrt{ax}+\frac{ax}{a-\sqrt{ax}}\right)\cdot\left(\sqrt{ax}-\frac{ax}{a+\sqrt{ax}}\right)$	$\frac{a^2x}{a-x}$

264	$\frac{a\sqrt{x}-x\sqrt{a}}{\sqrt{a}-\sqrt{x}}+\frac{a\sqrt{a}}{\sqrt{a}+\sqrt{x}}+\frac{x(\sqrt{ax}-x)}{a-x}$	$a+x$
265	$\left(\sqrt[4]{a^7}-\frac{ab}{\sqrt[4]{a}}\right):\left(\sqrt[3]{a}-\frac{b}{\sqrt[3]{a^2}}\right)$	$a\sqrt[12]{a^5}$
266	$\left(\sqrt{a+b}+\frac{1}{\sqrt{a-b}}\right):\left(1+\frac{1}{\sqrt{a^2-b^2}}\right)$	$\sqrt{a+b}$
267	$\left(\sqrt{2-3x}+\frac{1}{\sqrt{2+3x}}\right):\left(1+\frac{1}{\sqrt{4-9x^2}}\right)$	$\sqrt{2-3x}$
268	$\sqrt{\sqrt{5x+4}+\sqrt{5x-4}}\cdot\sqrt{\sqrt{5x+4}-\sqrt{5x-4}}$	$2\sqrt{2}$
269	$\frac{\sqrt[3]{8x^4y^4}+\sqrt[3]{x^7y^7}+\sqrt[6]{x^2y^2}}{\sqrt[3]{x^7y^7}-\sqrt[3]{xy}}$	$\frac{xy+1}{xy-1}$
270	$\sqrt[3]{\frac{(x-1)^4}{x^2+x}}:\left[\sqrt[6]{\left(\frac{x-1}{x+1}\right)^5}\cdot\sqrt{\frac{x^2-1}{x}}\right]$	$\sqrt[6]{x}$
271	$\left(\sqrt[6]{\frac{x+5}{x-2}}\cdot\sqrt[3]{\frac{x+5}{x-2}}\right)^2-\left(\frac{5}{x-2}+1\right)$	$\frac{2}{x-2}$
272	$\sqrt{\frac{(a+2\sqrt{b})(a\sqrt{b}+2b)}{\sqrt{b}}}\cdot\frac{a-2\sqrt{b}}{a^2-4b}$	1
273	$\left[\left(\sqrt[3]{x^2+2xy+y^2}\cdot\sqrt[4]{\frac{x-y}{(x+y)^3}}\right):\sqrt[12]{\frac{x-y}{x+y}}\right]+\sqrt[4]{(x-y)^3\sqrt{\frac{1}{x-y}}}$	$2\sqrt[6]{x-y}$
274	$2\sqrt{\frac{2a^3-a^2}{b^3-b^2}}-3a\sqrt{\frac{2a-1}{b^3-b^2}}+\frac{2}{b}\sqrt{\frac{2a^3-a^2}{b-1}}$	$\frac{a}{b}\sqrt{\frac{2a-1}{b-1}}$
275	$\frac{\sqrt[3]{8x^4y^4}+\sqrt[3]{x^7y^7}+\sqrt[6]{x^2y^2}}{\sqrt[3]{x^7y^7}-\sqrt[3]{xy}}$	$\frac{xy+1}{xy-1}$

276	$\left(\frac{\sqrt{2x+3}}{\sqrt{2x+3}-\sqrt{2x-3}}-\frac{\sqrt{2x+3}}{\sqrt{2x+3}+\sqrt{2x-3}}\right):\frac{\sqrt{2x-3}}{3}$	$\sqrt{2x+3}$
277	$\frac{\sqrt{a-b}}{\sqrt{a+b}+\sqrt{a-b}}-\frac{\sqrt{a-b}}{\sqrt{a+b}-\sqrt{a-b}}$	$\frac{b-a}{b}$
278	$\frac{3\sqrt{a}+2\sqrt{x}}{3\sqrt{a}-2\sqrt{x}}-\frac{3\sqrt{a}-2\sqrt{x}}{3\sqrt{a}+2\sqrt{x}}-\frac{24\sqrt{ax}}{9a-4x}$	0
279	$\frac{2x-\sqrt{4x^2+1}}{x+\sqrt{3x^2+2}}:\frac{x-\sqrt{3x^2+2}}{2x+\sqrt{4x^2+1}}:\frac{1}{x^2+1}$	$\frac{1}{2}$
280	$\sqrt{\left(\sqrt[5]{a^2}-\frac{b}{\sqrt[5]{a^3}}\right)\cdot\left(\sqrt[5]{a^2}-\frac{b}{\sqrt[5]{a^3}}\right)}$	$\frac{\sqrt[5]{a^2}\,\lvert a-b\rvert}{\lvert a\rvert}$
281	$\left[\left(\frac{a+b}{\sqrt{b}}-\sqrt{a}\right):\left(\frac{1}{\sqrt{b}}-\frac{1}{\sqrt{a}}\right)\right]\cdot\frac{a-b}{a\sqrt{a}+b\sqrt{b}}$	$\sqrt{a}$
282	$\left(\sqrt[5]{x\sqrt[3]{x^2}}\cdot\sqrt[5]{x^2\sqrt{x\sqrt[3]{x^2}}}:\sqrt[5]{x^4\sqrt[3]{x^2}}\right)^3$	$\frac{\sqrt[10]{x^9}}{x}$
283	$\sqrt{\frac{\sqrt{x-\sqrt{x^2-y^2}}}{\sqrt{x+\sqrt{x^2-y^2}}}}$	$\frac{\sqrt{2y}\left(\sqrt{x+y}-\sqrt{x-y}\right)}{2y}$
284	$\frac{a^{x+y}}{b}\cdot\sqrt[x-y]{\frac{b^{2x-2y}}{a^{x^2-y^2}}}$	b