

risolvere con la calcolatrice le seguenti espressioni goniometriche

1	$\cos 31^\circ \cdot \sin 31^\circ$	0,44
2	$\sin 50^\circ + \cos^2 100^\circ$	0,8
3	$\cos 57^\circ(1 + \sin 47^\circ)$	0,94
4	$\sin 29^\circ \cdot \sin 16^\circ 45'$	0,14
5	$\sin^2 47^\circ 30' - \cos 50^\circ$	-0,1
6	$\cos^3 37^\circ - \sin^2 51^\circ 15'$	-0,1
7	$\left(\sin 40^\circ + \frac{1}{2}\sin 80^\circ\right) \cdot (1 - \cos 40^\circ)$	0,27
8	$\tan 66^\circ(\cos^2 33^\circ - \sin^2 33^\circ)$	0,91
9	$\left(\cos 130^\circ + \frac{1}{2}\cos 100^\circ\right) \cdot \tan 75^\circ$	-2,72
10	$\sin 30^\circ \cdot (\sin 30^\circ - \sin 140^\circ - \sqrt{3}\sin 55^\circ \cos 55^\circ) \cdot (1 + \cos 11^\circ)$	-0,94
11	$\tan 101^\circ 15'(\sin 40^\circ + \cos 51^\circ 30')$	-6,36
12	$\frac{\cos^2 38^\circ - \cos^2 44^\circ}{\cos 41^\circ \cdot \cos 3^\circ}$	0,14
13	$\frac{\tan 121^\circ}{\sin 59^\circ 30'}$	-1,93

14	$\frac{\sin 19^\circ - \cos 38^\circ}{1 - \sin^2 76^\circ}$	-7,9
15	$\left(\frac{\sin 98^\circ}{1 + \cos 98^\circ}\right) \cdot \cos 49^\circ \cdot \sin^2 38^\circ + \sin 49^\circ \cdot \cos^2 38^\circ$	0,75
16	$\frac{\tan 120^\circ}{\tan 40^\circ} \cdot (1 + \sqrt{3} \tan 40^\circ) \cdot (\sin^2 40^\circ - \sqrt{3} \tan 40^\circ + \cos^2 40^\circ)$	2,42
17	$\tan 186^\circ \cdot (1 + \tan 93^\circ) \cdot \left(\frac{\sin 186^\circ + \cos 186^\circ - 1}{\sin 186^\circ}\right)$	-38,16
18	$\tan^2 50^\circ + \sin^2 25^\circ \cdot \left(\sin^2 25^\circ + \frac{1}{2} \sin 50^\circ \cot 50^\circ + \cos^2 25^\circ\right)$	1,66
19	$\sin(17^\circ 30') + \sin(36^\circ 30') + \frac{1}{2}(1 + \cos 19^\circ + 2 \sin^2 27^\circ)$	2,07
20	$\frac{1 + \cos 174^\circ - 2 \sin 87^\circ + 2 \sin^2 87^\circ}{\cos 87^\circ \cdot (1 - \sin 87^\circ)}$	38,21

calcolare con l'aiuto della calcolatrice il valore delle seguenti espressioni e, senza calcolatrice, esprimi i risultati in gradi decimali, gradi sessagesimali con primi e gradi radianti

	Espressioni	Gradi decimali	Gradi con primi	Gradi radianti
21	$\arcsin 0.52$	$\approx 31.33^\circ$	$\approx 31^\circ 20'$	$\approx 0.547$
22	$\arctan 1.28 + \arccos 0.65$	$\approx 101.46^\circ$	$\approx 101^\circ 28'$	$\approx 1.771$
23	$\frac{3}{4} \arccos 0.5 + \arccos \frac{\sqrt{3}}{2}$	$75^\circ$	$75^\circ 00'$	$\frac{5\pi}{12}$
24	$4 \arcsin 0.85 + \arccos 0.2$	$\approx 311.31^\circ$	$\approx 311^\circ 19'$	$\approx 5.433$
25	$\arcsin 0.99 - \arcsin 0.9$	$\approx 17.73^\circ$	$\approx 17^\circ 44'$	$\approx 0.309$
26	$\arccos 0.02 - \arctan 0.02$	$\approx 87.71^\circ$	$\approx 87^\circ 42'$	$\approx 1.531$

27	$\arctan 19.32 + \frac{5}{7} \arcsin 0.73$	$\approx 120.53^\circ$	$\approx 120^\circ 32'$	$\approx 2.104$
28	$\arcsin(7.25 - 4 \arctan 121)$	$\approx 89.08^\circ$	$\approx 89^\circ 05'$	$\approx 1.555$
29	$\arccos 0.81 + 2 \arcsin 0.36$	$\approx 78.10^\circ$	$\approx 78^\circ 06'$	$\approx 1.363$
30	$\pi + \arcsin(\pi - \sqrt{5})$	$\approx 244.89^\circ$	$\approx 244^\circ 54'$	$\approx 4.274$
31	$\arccos(1 - 0.26)^2 - \arccos(1 - 0.26^2)$	$\approx 35.61^\circ$	$\approx 35^\circ 37'$	$\approx 0.622$
32	$\arctan 5.71 + \arctan(-5.71)$	$0^\circ$	$0^\circ 00'$	0
33	$\arctan 5.71 - \arctan(-5.71)$	$\approx 160.13^\circ$	$\approx 160^\circ 08'$	$\approx 2.795$
34	$\arctan 1 + \arcsin 2$	<i>nessuna soluzione (come mai?)</i>		
35	$\frac{5 \arctan 8.52 - 4 \arcsin 0.67}{7}$	$\approx 35.47^\circ$	$\approx 35^\circ 28'$	$\approx 0.619$
36	$\arctan^2 2.94 + \frac{1}{2} \arccos^2 0.47$	$\approx 122.02^\circ$	$\approx 122^\circ 01'$	$\approx 2.130$
37	$\arcsin^2 0.79 - \arcsin(0.79^2)$	$\approx 8.91^\circ$	$\approx 8^\circ 55'$	$\approx 0.156$
38	$\arccos\left(\frac{1+\sqrt{3}}{2\sqrt{2}}\right) + \arctan(2 - \sqrt{3})$	$30^\circ$	$30^\circ 00'$	$\frac{\pi}{6}$
39	$\arcsin \frac{1+\sqrt{5}}{\sqrt{2}+\sqrt{3}}$	<i>nessuna soluzione (come mai?)</i>		
40	$\arcsin\left(\frac{2 \arcsin 0.17}{\pi}\right)$	$\approx 6.24^\circ$	$\approx 6^\circ 15'$	$\approx 0.109$

41	$\arctan 13.64 - \arctan(\arctan 13.64)$	$\approx 29.54^\circ$	$\approx 29^\circ 32'$	$\approx 0.516$
42	$\arctan[5 \arccos^2(\sqrt{2} - 1)]$	$\approx 81.31^\circ$	$\approx 81^\circ 18'$	$\approx 1.419$
43	$\arctan \left[ \cos^2 \sqrt{3} + \cos^2 \left( \frac{\pi}{2} - \sqrt{3} \right) \right]$	$45^\circ$	$45^\circ 00'$	$\frac{\pi}{4}$
44	$\frac{10}{9} \arctan \sqrt{\frac{5-2\sqrt{5}}{5}}$	$20^\circ$	$20^\circ 00'$	$\frac{\pi}{9}$
45	$\arcsin \left[ \frac{2}{3} \arccos \left( \sqrt{3} - \frac{3}{2} \right) \right]$	$\approx 63.01^\circ$	$\approx 63^\circ 01'$	$\approx 1.100$
46	$\frac{2}{3} \left( \arctan \pi^2 + \arctan \frac{1}{\pi^2} \right)$	$60^\circ$	$60^\circ 00'$	$\frac{\pi}{3}$
47	$\arctan \left  \tan \frac{\pi}{4} \right  / \arctan \left( \frac{\left  \sin \frac{\pi}{4} \right }{\cos \frac{\pi}{4}} \right)$	$\approx 57.30^\circ$	$\approx 57^\circ 18'$	1
48	$\arccos \sqrt{\sqrt{5} - 1}$	<i>nessuna soluzione (come mai?)</i>		
49	$\operatorname{arccot}(1 + \sqrt{2}) + \operatorname{arccot}(2 + \sqrt{3})$	$37.50^\circ$	$37^\circ 30'$	$\frac{5\pi}{24}$
50	$\arccos \left( \frac{\sqrt{5}-1}{4} \right) + \arcsin \left( \frac{\sqrt{5}+1}{4} \right)$	$126^\circ$	$126^\circ 00'$	$\frac{7\pi}{10}$
51	$\arcsin \frac{\sqrt{7}}{\sqrt[3]{20}} + \arccos \frac{\sqrt{7}}{\sqrt[3]{20}}$	$90^\circ$	$90^\circ 00'$	$\frac{\pi}{2}$