

1	$\begin{cases} \sqrt{3} \tan x - \tan y - 3 = 0 \\ \sqrt{3} \tan x + \tan y - 3 = 0 \end{cases}$	$\begin{cases} x = \frac{\pi}{3} + k\pi \\ y = k_1\pi \end{cases}$
2	$\begin{cases} \cos x + \cos y = \frac{1 - \sqrt{3}}{2} \\ \sqrt{3} \cos x + \cos y = 0 \end{cases}$	$\begin{cases} x = \pm \frac{\pi}{3} + 2k\pi \\ y = \pm \frac{5}{6}\pi + 2k_1\pi \end{cases}$
3	$\begin{cases} \cos x + \sin y = \frac{2 + \sqrt{2}}{2} \\ \cos x + \cos y = \frac{\sqrt{2}}{2} \end{cases}$	$\begin{cases} x = \pm \frac{\pi}{4} + 2k\pi \\ y = \frac{\pi}{2} + 2k\pi \end{cases}$
4	$\begin{cases} \cos x + \sin y = 1 \\ \cos x \sin y = \frac{1}{4} \end{cases}$	$\begin{cases} x = \pm \frac{\pi}{3} + 2k\pi \\ y = \frac{\pi}{6} + 2k_1\pi \vee y = \frac{5}{6}\pi + 2k_1\pi \end{cases}$
5	$\begin{cases} 2 \tan x + 6 \tan y = 0 \\ \tan x + \tan y = \frac{2}{3}\sqrt{3} \end{cases}$	$\begin{cases} x = \frac{\pi}{3} + k\pi \\ y = \frac{5}{6}\pi + k_1\pi \end{cases}$
6	$\begin{cases} \sin^2 x + \cos^2 y = 1 \\ \cos^2 x - \sin^2 y = 0 \end{cases}$	$\begin{cases} x = \frac{\pi}{4} + 2k\pi \vee x = \frac{3}{4}\pi + 2k\pi \\ y = \frac{\pi}{4} + 2k_1\pi \vee y = \frac{3}{4}\pi + 2k_1\pi \end{cases}$
7	$\begin{cases} 2 \sin x - 2 \sin y = 1 \\ \sin y - \sin x = 2 \end{cases}$	<i>impossibile</i>
8	$\begin{cases} 2 \sin x + 2 \sin y = \sqrt{2} + 1 \\ \sin x = \sqrt{2} \sin y \end{cases}$	$\begin{cases} x = \frac{\pi}{4} + 2k\pi \vee x = \frac{3}{4}\pi + 2k\pi \\ y = \frac{\pi}{6} + 2k_1\pi \vee y = \frac{5}{6}\pi + 2k_1\pi \end{cases}$
9	$\begin{cases} 2 \cos x + 4\sqrt{2} \sin y = 3\sqrt{2} \\ 2 \cos x - 4\sqrt{2} \sin y = -\sqrt{2} \end{cases}$	$\begin{cases} x = \frac{\pi}{4} + 2k\pi \vee x = -\frac{\pi}{4} + 2k\pi \\ y = \frac{\pi}{6} + 2k_1\pi \vee y = \frac{5}{6}\pi + 2k_1\pi \end{cases}$
10	$\begin{cases} \sin x + 3 \sin y = \sqrt{3} \\ \sin x - 3 \sin y = -2\sqrt{3} \end{cases}$	$\begin{cases} x = \frac{4}{3}\pi + 2k\pi \vee x = \frac{5}{3}\pi + 2k\pi \\ y = \frac{\pi}{3} + 2k_1\pi \vee y = \frac{2}{3}\pi + 2k_1\pi \end{cases}$
11	$\begin{cases} \sin x + \cos y = 1 \\ 2 \sin x + 4 \cos y = 1 \end{cases}$	<i>impossibile</i>
12	$\begin{cases} \sin x = \frac{\sqrt{3}}{3} \cos y \\ \sqrt{3} \cos y + \sin x = -2 \end{cases}$	$\begin{cases} x = \frac{7}{6}\pi + 2k\pi \vee x = \frac{11}{6}\pi + 2k\pi \\ y = \frac{5}{6} + 2k_1\pi \vee y = -\frac{5}{6}\pi + 2k_1\pi \end{cases}$
13	$\begin{cases} 3 \cot x \tan y = 1 \\ \cot x + \tan y = \frac{2\sqrt{3}}{3} \end{cases}$	$\begin{cases} x = \frac{\pi}{3} + k\pi \\ y = \frac{\pi}{6} + k_1\pi \end{cases}$

14	$\begin{cases} \cos^2 x - 2 \cos^2 y = -1 \\ \cos x + 2 \cos y = 1 \end{cases}$	$\begin{cases} x = \pi + 2k\pi \\ y = 2k\pi \end{cases}$
15	$\begin{cases} 2 \operatorname{sen} x + 5 \operatorname{sen} y = 6 \\ 4 \operatorname{sen}^2 x + 3 \operatorname{sen}^2 y = 4 \end{cases}$	$\begin{cases} x = \frac{\pi}{6} + 2k\pi \vee x = \frac{5}{6}\pi + 2k\pi \\ y = \frac{\pi}{2} + 2k_1\pi \end{cases}$
16	$\begin{cases} \frac{1}{3} \cot x + \tan y = 0 \\ \frac{1}{2} \cot^2 x + \frac{3}{2} \tan^2 y = 2 \end{cases}$	$\begin{cases} x = \frac{5}{6}\pi + k\pi \\ y = \frac{\pi}{6} + k_1\pi \end{cases} \vee \begin{cases} x = \frac{\pi}{6} + k\pi \\ y = \frac{5}{6}\pi + k_1\pi \end{cases}$
17	$\begin{cases} 2 \cos x + 2 \cos y = \sqrt{2} + \sqrt{3} \\ \cos^2 x + 2 \cos^2 y = 2 \end{cases}$	$\begin{cases} x = \pm \frac{\pi}{4} + 2k\pi \\ y = \pm \frac{\pi}{6} + 2k_1\pi \end{cases}$
18	$\begin{cases} x + y = \pi \\ \cos x - \cos y = -1 \end{cases}$	$\begin{cases} x = \frac{4}{3}\pi - 2k\pi \\ y = -\frac{\pi}{3} - 2k\pi \end{cases} \vee \begin{cases} x = \frac{2}{3}\pi + 2k\pi \\ y = \frac{\pi}{3} + 2k\pi \end{cases}$
19	$\begin{cases} \tan y + 2 \cot x = 0 \\ 2y - 2x = \pi \end{cases}$	$\begin{cases} x = \frac{\pi}{2} + k\pi \\ y = \pi + 2k\pi \end{cases}$
20	$\begin{cases} x - y = \frac{3}{2}\pi \\ \cos x + 3 \operatorname{sen} y = 2\sqrt{2} \end{cases}$	$\begin{cases} x = \frac{7}{4}\pi + 2k\pi \\ y = \frac{\pi}{4} + 2k\pi \end{cases} \vee \begin{cases} x = \frac{9}{4}\pi + 2k\pi \\ y = \frac{3}{4}\pi + 2k\pi \end{cases}$
21	$\begin{cases} x + y = 90^\circ \\ \sqrt{3} \operatorname{sen} x - \operatorname{sen} y = 0 \end{cases}$	$\begin{cases} x = 30^\circ - k180^\circ \\ y = 60^\circ + k180^\circ \end{cases}$
22	$\begin{cases} \sqrt{3} \operatorname{sen} x + \cos y = \sqrt{3} \\ 4x + 4y = 8\pi \end{cases}$	$\begin{cases} x = \frac{\pi}{2} + 2k\pi \\ y = \frac{3}{2}\pi - 2k\pi \end{cases} \vee \begin{cases} x = \frac{\pi}{6} + 2k\pi \\ y = \frac{11}{3}\pi - 2k\pi \end{cases}$
23	$\begin{cases} x + y = \frac{\pi}{2} \\ \operatorname{sen}\left(\frac{\pi}{2} + x\right) + \cos y = 1 \end{cases}$	$\begin{cases} x = \frac{\pi}{2} + 2k\pi \\ y = -2k\pi \end{cases} \vee \begin{cases} x = +2k\pi \\ y = \frac{\pi}{2} - 2k\pi \end{cases}$
24	$\begin{cases} x + y = \pi \\ \operatorname{sen} y \cos x - \cos^2 x = 0 \end{cases}$	$\begin{cases} x = \pm \frac{\pi}{4} + k\pi \\ y = k\pi \end{cases} \vee \begin{cases} x = \frac{\pi}{2} + k\pi \\ y = \frac{\pi}{2} - k\pi \end{cases}$
25	$\begin{cases} x + y = \frac{3}{2}\pi \\ \operatorname{sen} x \cos y = -\frac{1}{2} \end{cases}$	$\begin{cases} x = \frac{\pi}{4} + k\frac{\pi}{2} \\ y = \frac{5}{4}\pi - k\frac{\pi}{2} \end{cases}$
26	$\begin{cases} x + y = 90^\circ \\ 3 \tan x \cot y = 1 \end{cases}$	$\begin{cases} x = 30^\circ - k180^\circ \\ y = 60^\circ + k180^\circ \end{cases}$

## Sistemi di equazioni goniometriche

27	$\begin{cases} x + y = \frac{\pi}{2} \\ \cos x \operatorname{sen} y = \frac{1}{4} \end{cases}$	$\begin{cases} x = \frac{\pi}{3} + k\pi \vee x = -\frac{\pi}{3} + k\pi \\ y = \frac{\pi}{6} + k\pi \vee y = \frac{5}{6}\pi + k\pi \end{cases}$
28	$\begin{cases} x - y = \frac{\pi}{2} \\ 2\operatorname{sen} x \cos y = 1 \end{cases}$	$\begin{cases} x = \frac{\pi}{4} + k\frac{\pi}{2} \\ y = \frac{\pi}{4} + k\pi \end{cases}$
29	$\begin{cases} x - y = 45^\circ \\ \cos(x + y) = \frac{\sqrt{2}}{2} \end{cases}$	$\begin{cases} x = 45^\circ + k180^\circ \\ y = k180^\circ \end{cases} \vee \begin{cases} x = 180^\circ + k180^\circ \\ y = 135^\circ + k180^\circ \end{cases}$
30	$\begin{cases} x + y = 60^\circ \\ \tan(x - y) = -\sqrt{3} \end{cases}$	$\begin{cases} x = 90^\circ + k90^\circ \\ y = -30 - k90^\circ \end{cases}$
31	$\begin{cases} \operatorname{sen}(x + y) = 1 \\ \cos(x - y) = \frac{\sqrt{2}}{2} \end{cases}$	$\begin{cases} x = \frac{3}{8}\pi + (k_1 + k_2)\pi \\ y = \frac{\pi}{8} + (k_1 - k_2)\pi \end{cases} \vee \begin{cases} x = \frac{\pi}{8} + (k_1 + k_2)\pi \\ y = \frac{3}{8}\pi + (k_1 - k_2)\pi \end{cases}$
32	$\begin{cases} \operatorname{sen}(x - y) = 0 \\ \tan(x + y) = -\sqrt{3} \end{cases}$	$\begin{cases} x = \frac{2}{3}\pi + (k_1 + k_2)\frac{\pi}{2} \\ y = \frac{2}{3}\pi + (k_2 - k_1)\frac{\pi}{2} \end{cases}$
33	$\begin{cases} y = \cos x \\ y = 1 - 2\sqrt{x} \end{cases}$	$x = 0$
34	$\begin{cases} y = \operatorname{sen} x \\ y = 1 - 2x \end{cases}$	$x = \alpha, \text{ con } 0 < \alpha < \frac{\pi}{2}$
35	$\begin{cases} y = \arccos x \\ y = x x  \end{cases}$	$x = \alpha, \text{ con } 0 < \alpha < 1$
36	$\begin{cases} y = \operatorname{arctg} x \\ y = 1 + e^x \end{cases}$	<i>impossibile</i>