6	$\sin x+\sin^2\frac{x}{2}=\cos^2\frac{x}{2}$	$\left[-2\pi;-\frac{\pi}{2}\right]$
7	$7\mathrm{tg}^2x-\frac{1}{\cos x}+1=0$	$\left[-\frac{5\pi}{2};-\pi\right]$
8	$4\mathrm{tg}^2x+\frac{3}{\cos^2 x}+3=0$	$\left[\frac{5\pi}{2};4\pi\right]$
9	$\cos 2x=\sin\left(\frac{3\pi}{2}-x\right)$	$\left[\frac{3\pi}{2};\frac{5\pi}{2}\right]$
10	$\cos 2x=\sin\left(x+\frac{\pi}{2}\right)$	$[-2\pi;-\pi]$

11	$2\sin^2\left(\frac{3\pi}{2}-x\right)=\cos x$	$\left[-\frac{3\pi}{2};0\right]$
12	$2\sin^2\left(\frac{\pi}{2}-x\right)=-\sqrt{3}\cos x$	$\left[-3\pi;-\frac{3\pi}{2}\right]$
13	$-\sqrt{2}\sin\left(-\frac{5\pi}{2}+x\right)\cdot\sin x=\cos x$	$\left[\frac{9\pi}{2};6\pi\right]$
14	$9^{x+1}-2\cdot 3^{x+2}+5=0$	$\left(\log_3\frac{3}{2};\sqrt{5}\right)$
15	$\sin x=\cos\left(\frac{\pi}{2}-2x\right)$	$\left(-\frac{7\pi}{2};-2\pi\right]$

16	$2\cos^2 x + \cos x - 1 = 0$	$\left[-\frac{7\pi}{2}; -2\pi\right)$
17	$2\sin^2 x + \sin x - 1 = 0$	$\left[-\frac{7\pi}{2}; -2\pi\right]$
18	$\cos 2x - 0{,}75 + \sin^2 x = 0$	$\left[\frac{3\pi}{2}; 3\pi\right]$
19	$1 + \cos\left(\frac{\pi}{2} + x\right) = \cos 2x$	$\left[-3\pi; -\frac{3\pi}{2}\right)$
20	$\cos^2 x - 0{,}75 = \cos 2x$	$\left[-\frac{9\pi}{2}; -3\pi\right]$
21	$\cos\left(\frac{\pi}{2} + 2x\right) = \sin x$	$\left[\pi; \frac{5\pi}{2}\right)$

22	$\cos 2x - 0{,}5 + \sin^2 x = 0$	$\left[\pi; \frac{5\pi}{2}\right]$
23	$\cos 2x + 0{,}5 = \cos^2 x$	$\left[-2\pi; -\frac{\pi}{2}\right]$
24	$2\sin^2 x - 3\sin x + 1 = 0$	$\left(3\pi; \frac{9\pi}{2}\right]$
25	$\sqrt{\cos^2 x + 15{,}25 - \cos 2x} = 4$	$\left[-\frac{9\pi}{2}; -3\pi\right]$
26	$9^{\cos^2 x} = 3^{\sin 2x} \cdot 9$	$\left(-2\pi; -\frac{\pi}{2}\right)$
27	$4^{\sin^2 x} = \left(\frac{1}{2}\right)^{\sin 2x} \cdot 4$	$\left(2\pi; \frac{7\pi}{2}\right)$
28	$\log_{\frac{1}{3}}\left(\sqrt{2}\cos x - \sin 2x + 27\right) = -3$	$\left[-\pi; \frac{\pi}{2}\right]$

29	$\log_5(\cos x - \sin 2x + 25) = 2$	$\left[2\pi; \frac{7\pi}{2}\right]$
30	$16^{\cos^2 x} = \left(\frac{1}{4}\right)^{\sin 2x} \cdot 16$	$\left(-\frac{3\pi}{2}; 0\right)$
31	$25^{\sin^2 x} = 5^{\sin 2x} \cdot 25$	$\left(-\pi; \frac{\pi}{2}\right)$
32	$\sqrt{8{,}5 + \sin^2 x + \cos 2x} = 3$	$\left[\pi; \frac{5\pi}{2}\right]$
33	$\sqrt{\cos^2 x + 24{,}75 - \cos 2x} = 5$	$\left[-\frac{7\pi}{2}; -2\pi\right.$
34	$\left(\frac{1}{36}\right)^{\cos^2 x} = 6^{\sin 2x} \cdot \frac{1}{36}$	$\left(\pi; \frac{5\pi}{2}\right)$

35	$\sqrt{3}\sin 2x+\cos 2x+1=0$	$\left[-\frac{5\pi}{2};-\pi\right]$
36	$\sqrt{3}\sin 2x+3\cos 2x=3$	$\left[\frac{3\pi}{2};3\pi\right]$
37	$\cos\left(\frac{3\pi}{2}+2x\right)=\sqrt{3}\cos x$	$[-4\pi;-3\pi]$
38	$\cos\left(\frac{3\pi}{2}-2x\right)=\sqrt{3}\sin x$	$[-3\pi;-2\pi]$
39	$\cos\left(\frac{\pi}{2}-2x\right)=\sqrt{2}\cos x$	$[-6\pi;-5\pi]$
40	$\cos\left(\frac{\pi}{2}+2x\right)=\sqrt{2}\sin x$	$[-5\pi;-4\pi]$

41	$3\sin 2x - 4\cos x + 3\sin x - 2 = 0$	$\left[-\frac{\pi}{2}; \frac{\pi}{2}\right]$
42	$\left(\sqrt{3}\cos^2 x + 2\cos x\right)\sqrt{1-2\sin x} = 0$	$\left[\frac{\pi}{2}; \frac{5\pi}{2}\right]$
43	$2\sin 2x = 4\cos x - \sin x + 1$	$\left[\frac{\pi}{2}; \frac{3\pi}{2}\right]$
44	$\sin x(2\sin x - 3\text{ctg}x) = 3$	$\left[-\frac{3\pi}{2}; \frac{\pi}{2}\right]$
45	$\cos x(2\cos x + \text{tg}x) = 1$	$\left[-\frac{5\pi}{2}; -\frac{\pi}{2}\right]$
46	$\sqrt{2}\sin^3 x - \sqrt{2}\sin x + \cos^2 x = 0$	$\left[-\frac{5\pi}{2}; -\pi\right]$

47	$6\cos^2 x - 7\cos\left(\frac{3\pi}{2} - x\right) - 1 = 0$	$\left[2\pi; \frac{7\pi}{2}\right]$
48	$12^{\sin x} = 4^{\sin x} \cdot 3^{-\sqrt{3}\cos x}$	$\left[\frac{5\pi}{2}; 4\pi\right]$
49	$12^{\sin x} = 3^{\sin x} \cdot 4^{\cos x}$	$\left[2\pi; \frac{7\pi}{2}\right]$
50	$10^{\sin x} = 2^{\sin x} \cdot 5^{-\cos x}$	$\left[-\frac{5\pi}{2}; -\pi\right]$
51	$14^{\cos x} = 2^{\cos x} \cdot 7^{-\sin x}$	$\left[\frac{\pi}{2}; 2\pi\right]$
52	$15^{\cos x} = 3^{\cos x} \cdot 5^{\sin x}$	$\left[5\pi; \frac{13\pi}{2}\right]$

53	$20^{\cos x}=4^{\cos x}\cdot 5^{-\sin x}$	$\left[-\frac{9\pi}{2};-3\pi\right]$
54	$21^{-\sin x}=3^{-\sin x}\cdot 7^{\cos x}$	$\left[-\frac{3\pi}{2};0\right]$
55	$\left(36^{\cos x}\right)^{\sin x}=\left(\frac{1}{6}\right)^{\sqrt{2}\sin x}$	$\left[-\pi;\frac{\pi}{2}\right]$
56	$\left(25^{\sin x}\right)^{\cos x}=5^{\sqrt{3}\sin x}$	$\left[\frac{5\pi}{2};4\pi\right]$
57	$\left(25^{\sin x}\right)^{-\cos x}=5^{\sqrt{2}\sin x}$	$\left[\frac{3\pi}{2};3\pi\right]$
58	$\left(64^{\cos x}\right)^{\sin x}=8^{\sqrt{3}\cos x}$	$\left[\pi;\frac{5\pi}{2}\right]$
59	$\left(49^{\cos x}\right)^{\sin x}=7^{\sqrt{2}\cos x}$	$\left[\frac{5\pi}{2};4\pi\right]$

60	$\left(16^{\sin x}\right)^{\cos x}=\left(\frac{1}{4}\right)^{\sqrt{3}\sin x}$	$\left[2\pi;\frac{7\pi}{2}\right]$
61	$\left(81^{\sin x}\right)^{\cos x}=\left(\frac{1}{9}\right)^{\sqrt{2}\cos x}$	$\left[-3\pi;-\frac{3\pi}{2}\right]$
62	$\left(81^{\cos x}\right)^{\sin x}=9^{-\sqrt{3}\cos x}$	$\left[-2\pi;-\frac{\pi}{2}\right]$