

- 3) $\cos^2 x + 4\sin^2 x + 2\sin 2x = 0$;
- 4) $4\cos^2 x + 2\sin^2 x = 3\sin 2x$;
- 5) $5\sin^2 x + 4\sin x \cos x - 5\cos^2 x = 2$;
- 6) $3\sin^2 x - 4\sin x \cos x + \cos^2 x = 3$;
- 7) $3\sin^2 x + 5\cos^2 x - 2\cos 2x + 4\sin 2x = 0$;
- 8) $2\sin^2 x - \sin x \cos x + 5\cos^2 x = 2$;
- 9) $\sin^2 x - 30\sin x \cos x + 25\cos^2 x = 25$;
- 10) $(\sin x + 2\cos x)(3\sin x + \cos x) = \sin 2x$;
- 11) $5 - 4\sin^2 x = 5\cos^2 x$;
- 12) $3\sin^2 x + \sin 2x = 2$;
- 13) $3\sin^2 x - \sin 2x = 3\cos^2 x$;
- 14) $4\sin^2 x + 3\sin x \cos x - 7\cos^2 x = 0$.