1 $0 \leqq \theta < 2\pi$ のとき，次の方程式，不等式を解け。

(1) $2\sin^2\theta - 3\cos\theta = 0$　(2) $2\cos^2\theta - 3\sin\theta - 3 = 0$

(3) $2\sin^2\theta + \cos\theta - 2 = 0$　(4) $(2\sin\theta + \sqrt{3})\sin\theta = 0$

(5) $(\sin\theta + 1)(2\sin\theta - 1) = 0$　(6) $2\cos^2\theta - 5\cos\theta - 3 = 0$

(7) $2\sin^2\theta - 3\cos\theta = 0$　(8) $\sqrt{3}\tan^2\theta - 2\tan\theta - \sqrt{3} = 0$

2 $0 \leqq x < 2\pi$ のとき，次の方程式を解け。

(1) $\cos 2x = \cos x$　(2) $\sin 2x = \cos x$　(3) $2\cos 2x + 4\cos x - 1 = 0$

(4) $\sin x(1 + \cos 2x) + \sin 2x(1 + \cos x) = 0$　(5) $\cos 2x = \sin x$

(6) $\cos 2x = \cos x$　(7) $\sin 2x = \cos x$　(8) $\sin 2x = \sqrt{2}\sin x$

(9) $\cos 2x = 3\cos x - 2$

3 $0 \leqq x < 2\pi$ のとき，次の方程式を解け。

(1) $\sin x + \sqrt{3}\cos x = -1$　(2) $2(\sin x - \cos x) = \sqrt{6}$

(3) $\sqrt{3}\sin 2x - \cos 2x = -\sqrt{2}$　(4) $\sin x - \cos x = 1$

(5) $2(\sin x + \cos x) = \sqrt{6}$　(6) $\sin x + \cos x = \dfrac{1}{\sqrt{2}}$