Solving Trigonometric Equations- More practice

Ex: 1 Solve **a)** $\cos x - \sqrt{3} = -\cos x$ **b)** $\sin x + \sqrt{2} = -\sin x$

You Try: **Solve** $\sin x - \sqrt{2} = -\sin x$

Ex: 2 Solve **a)** $2\cos^2 x - 1 = 0$ **b)** $3\tan^2 x - 1 = 0$

You Try: **Solve** $4\sin^2 x - 3 = 0$

Ex: 3 Solve **a)** $2\cos^2 x = \cos x$ **b)** $\cot x \cos^2 x = 2\cot x$

You Try: **Solve** $\sin^2 x = 2\sin x$

Ex: 4

a) Find all solutions of $2\cos^2 x - 5\cos x + 2 = 0$ **in the interval** $[0, 2\pi)$**.**

b) Find all solutions of $2\sin^2 x - \sin x - 1 = 0$ **in the interval** $[0, 2\pi)$**.**

You Try: **Find all solutions of** $2\sin^2 x - 3\sin x + 1 = 0$ **in the interval** $[0, 2\pi)$**.**

Ex: 5 Solve **a)** $\cot^2 x + \csc^2 x - 7 = 0$ **b)** $2\sin^2 x + 3\cos x - 3 = 0$