Solve equations for all values between 0 and 2π.

1. $\sin 2x + \cos x = 0$ 2. $3\sin q = 1 + \cos 2q$

3. $\cos 2x = \cos x$ 4. $4\sin x \cos x = \sqrt{3}$

5. $(\sin x)(\cos 2x) + (\cos x)(\sin 2x) = \dfrac{1}{2}$ 6. $\tan^2 x = 3\tan \dfrac{5p}{4}$

7. $4\sin x \cos x = \sin^2 x + \cos^2 x$ 8. $\sec^2 q + 2 = 3\sec q$