

§2.3 (part 2): Solving Trigonometric Equations

1.] Suppose x is any angle inside $[0, 2\pi)$. Solve the following equation for x : $2\sin^2(x) - \sin(x) - 1 = 0$

2.] Suppose x is any angle inside $[0, 2\pi)$. Solve the following equation for x : $2\sin^2(x) + 3\cos(x) = 3$

3.] Find the general solution to the equation: $\sin(x) + 1 = \cos(x)$

4.] Find the general solution to the equation: $2 \cos(3x) - 1 = 0$

5.] Find the general solution to the equation: $2 \tan\left(\frac{x}{2}\right) - 2 = 0$

6.] Find all solutions in the interval $[0, 2\pi)$: $\sin^2(x) - 3 \sin(x) - 2 = 0$