

Solving Trigonometric Functions with Multiples of Angles

Examples:

1. Find the solutions on the interval $[0, 2\pi)$ for the equation $2 \sin(3\theta) - 1 = 0$. Then, state all possible solutions.

2. Find all solutions of the equation $\sqrt{3} \tan\left(\frac{\theta}{2}\right) - 1 = 0$.