In problems 22-23, find all solutions of the equation in the interval \([0, 2\pi)\).

22. \(\sin(x + \pi) - \sin x + 1 = 0\)

\[ x = \frac{\pi}{6}, \frac{11\pi}{6} \]

23. \(\cos\left(x + \frac{\pi}{4}\right) - \cos\left(x - \frac{\pi}{4}\right) = 1\)

\[ x = \frac{5\pi}{4}, \frac{3\pi}{4} \]

In problems 24-25, find all solutions of the equation.

24. \(\tan(x + \pi) + 2\sin(x + \pi) = 0\)

\[ x = \pi n, \quad \frac{\pi}{3} + 2\pi n, \quad \frac{5\pi}{3} + 2\pi n \]

25. \(\cos\left(x - \frac{\pi}{2}\right) + \sin^2 x = 0\)

\[ x = \pi n, \quad \frac{3\pi}{2} + 2\pi n \]