

Trigonometry Equations Packet 3-9 Answers

- 1] $120^\circ, 300^\circ$ 2] $\begin{cases} 30 + 360n \\ 150 + 360n \end{cases}$ 3] $30^\circ, 330^\circ$ 4] $\begin{cases} 135 + 360n \\ 225 + 360n \end{cases}$
- 5] $163^\circ, 283^\circ$ 6] $\frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$ 7] $\frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$ 8] $-\frac{\pi}{4}, \frac{3\pi}{4}$
- 9] $\frac{\pi}{2} + \pi n$ 10] $\frac{\pi}{2}$ 11] $\begin{cases} 90 + 180n \\ 45 + 360n \\ 135 + 360n \end{cases}$ 12] $180n$
- 13] $\frac{2\pi}{3} + \pi n$ 14] $2\pi n$ 15] $-150^\circ, -30^\circ, 0^\circ$ 16] $-45^\circ, 0^\circ$
- 17] $\frac{\pi}{3}, \frac{5\pi}{3}$ 18] $\frac{\pi}{3}, \frac{5\pi}{3}$ 19] no solution 20] no solution
- 21] $-180^\circ, -60^\circ, 60^\circ$ 22] $30^\circ, 90^\circ, 150^\circ$ 23] $210^\circ, 330^\circ$ 24] 1.231, 5.052
- 25] $\frac{\pi}{6}, \frac{5\pi}{6}$ 26] $15^\circ, 75^\circ, 195^\circ, 255^\circ$ 27] $30^\circ, 150^\circ, 210^\circ, 330^\circ$
- 28] $15^\circ, 75^\circ, 135^\circ, 195^\circ, 255^\circ, 315^\circ$ 29] $10^\circ, 110^\circ, 130^\circ, 230^\circ, 250^\circ, 350^\circ$
- 30] $\frac{\pi}{3}, \frac{2\pi}{3}, \frac{4\pi}{3}, \frac{5\pi}{3}$ 31] $7.5^\circ, 37.5^\circ, 97.5^\circ, 127.5^\circ, 187.5^\circ, 217.5^\circ, 277.5^\circ, 307.5^\circ$
- 32] $60^\circ, 300^\circ$ 33] $\frac{\pi}{3}, \frac{5\pi}{3}, \frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$ 34] $120^\circ, 240^\circ, 180^\circ$
- 35] $\frac{\pi}{2}, \frac{7\pi}{6}, \frac{11\pi}{6}$ 36] $[0, 360)$ 37] $20^\circ, 100^\circ, 140^\circ, 220^\circ, 260^\circ, 340^\circ$
- 38] $0, \pi, \frac{4\pi}{3}, \frac{5\pi}{3}$ 39] no solution 40] $\frac{2\pi}{3}, \frac{4\pi}{3}$
- 41] $\frac{\pi}{2}, \frac{3\pi}{2}, \frac{\pi}{6}, \frac{5\pi}{6}$ 42] $45^\circ, 135^\circ$ 43] $\frac{5\pi}{8}, \frac{7\pi}{8}, \frac{13\pi}{8}, \frac{15\pi}{8}$
- 44] $90 + 180n$ 45] π 46] $\frac{\pi}{6} + \pi n$ 47] $\frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$
- 48] $\frac{\pi}{6}, \frac{2\pi}{3}, \frac{7\pi}{6}, \frac{5\pi}{3}$ 49] $\frac{3\pi}{2}$ 50] 60°