$0° \le x < 360°$

26. $2\cos^2 x + 3\cos x - 2 = 0$

$(2\cos x - 1)(\cos x + 2) = 0$

$2\cos x - 1 = 0$ $\quad$ $\cos x + 2 = 0$

$\cos x = \frac{1}{2}$ $\quad$ $\cancel{\cos x = -2}$

$x = 60°, 300°$

$2x^2 + 3x - 2$

$(2x - 1)(x + 2)$

$4x - x$

-2

$-1 \quad 2$

$1 \quad -2$

17. $\sqrt{2}\sin x - 1 = 0$

$\sin x = \frac{1}{\sqrt{2}}$

$\sin x = \frac{\sqrt{2}}{2}$

$x = 45°$

principal values

sin/tan I, IV

cos I, II

$0 \le x < 360°$

23. $\sqrt{2}\cos x + 1 = 0$

$\cos x = \frac{-1}{\sqrt{2}}$

$\cos x = -\frac{\sqrt{2}}{2}$

$x = 135°, 225°$

19. $\sin 2x - 1 = 0$ $\quad 0 \le x < 360°$

$\sin 2x = 1$ $\qquad \sin 90 = 1$

$\sin 2x = 1 = \sin 90$ $\qquad 2x = 90$

$\sin 2x = \sin 90$ $\qquad x = 45°$

24. $\cos x \tan x = \frac{1}{2}$ $\quad 0 \le x < 360°$

$\cancel{\cos x}\,\frac{\sin x}{\cancel{\cos x}} = \frac{1}{2}$

$\sin x = \frac{1}{2}$

$x = 30°, 150°$

27. $\sin 2x = -\sin x$ $\qquad 0 \le x < 360°$

$\underline{\sin 2x} + \sin x = 0$

$2\underline{\sin x}\cos x + \underline{\sin x} = 0$

$\sin x(2\cos x + 1) = 0$

$\sin x = 0 \qquad 2\cos x + 1 = 0$

$x = 180°, 0° \qquad \cos x = -\frac{1}{2}$

$x = 120°, 240°$