(D)
$$COS \times (2SIN \times +1) = 0$$

 $COS \times = 0$ $SIN \times = -1/2$
 $\frac{71}{2}$ $\frac{377}{2}$ $\frac{777}{6}$ $\frac{1177}{6}$

$$\sum Sec \times (2\cos x - \sqrt{2}) = 0$$

$$Sec \times = 0 \qquad \cos x = \frac{\sqrt{2}}{2}$$

$$\frac{\pi}{2}, \quad \frac{3\pi}{2} \qquad \frac{\pi}{4}, \quad \frac{7\pi}{4}$$
or \emptyset

B)
$$(tanx + \sqrt{3})$$
 $(cosx + 2) = 0$

60° $tanx = -\sqrt{3}$ $asx = -2$
 $\frac{2\pi}{3}$ $\frac{4\pi}{3}$

(1)
$$(2\cos x + \sqrt{3})(2\sin x - 1) = 0$$

 $\cos x = -\frac{13}{2} \sin x = \frac{1}{2}$
 $\frac{5\pi}{6}, \frac{7\pi}{6}$ $\frac{7\pi}{3}, \frac{4\pi}{3}$

(B)
$$\cos x \sin x - 2\cos x = 0$$

 $\cos x (\sin x - 2) = 0$
 $\cos x = 0$ $\sin x = 2$
 $\frac{3\pi}{2}$

(16)
$$tanx sinx + sinx = 0$$

 $sinx (tanx+1) = 0$
 $sinx = 0$ $tanx = -1$
 o, π $\frac{3\pi}{4}$ $\frac{7\pi}{4}$

(B)
$$25/n^{2}x - 5/nx - 1 = 0$$

 $(25/nx + 1)$ $(5/nx - 1) = 0$
 $5/nx = -1/2$ $5/nx = 1$
 $-7/1$ $1/1$ $-7/2$
 6 , 6

$$3 tan^{3}x = tan x$$

$$3 tan^{3}x - tan x = 0$$

$$tan x (3 tan^{2}x - 1) = 0$$

$$tan x = 0 tan^{2}x = \frac{1}{3}$$

$$\frac{7}{2}, \frac{311}{2}, tan = \pm \frac{1}{3}$$

$$\frac{77}{6}, \frac{11}{6}$$

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

 $2 (1 - \sin^2 x) + \sin x - 1 = 0$
 $2 - 2\sin^2 x + \sin x - 1 = 0$
 $2\sin^2 x - \sin x - 1 = 0$
 $2\sin^2 x - \sin x - 1 = 0$
 $2\sin x + 1) (\sin x - 1) = 0$
 $3\sin x = \frac{1}{2} \sin x = 1$

(24)
$$a \cos ax + 1 = 0$$

 $\cos ax = -\frac{1}{2}$
over interval $0 = x = \frac{4\pi}{3}$
 $2x = \cos(\frac{1}{2})$
 $60^{\circ} = \frac{\pi}{3}$
 $2x = \frac{2\pi}{3}$
 $2x = \frac{4\pi}{3}$
 $x = \frac{\pi}{3}$
 $x = \frac{2\pi}{3}$

- (26) √3 tan 3x + 1 = 0 $\tan 3x = -\sqrt{3}/3$ 3X = 48, 5% Z = 11 51 518
- (25) COS 3X = SIN 3X $\cos^2 3X = \sin^2 3X$ 1- sin 3X = 514 3X 2511 23X = 1 511 3x = /2 511 3X = + 1/2 15 3X = T/4, 3T/4, X = 11/2 17/4 511/2
- 251n = +13 =0 (39) 60° T/3 sin 1/3 = -53 $\frac{X}{3} = \frac{41}{3}, \frac{7}{3}$ X = HT 5T
- 39, 2 cos 3x = 1 CO5 3X = 1/2 60° 17/3 3X = 1/3 5/3 X= Mg 5 Mg
- 2 sinxtanx tanx = 1 2sinx (H) tanx (2sinx-1) = 1 - 2sinx tan x = -1 x = 37/4, 71/4
- secrtany cosx cotx = sinx (42) C05.2X SIN COS & 6112X - CO5 X - SINECOS X = 0 5112x - 5112cos2x - cos4x = 0 1-cos2x - (1-cos2x)cos2x) - cos4x = 0 1-cos2x-1 - cos2x + cos4x - cos4x = 0

CO5 1 =0 X = 1/2 51/2

- (43) tonx 300tx =0 501× _ 3 COSX =0 COSX SIAX 5/11 x - 3652x =0 SINX COSX 511 × - 3 cos × = 0 5111 X tan2x = = 53 30° 76, 577 11T
 - (45) tan3x + 1 = sec 3xtun 2 + 2 tan + 1 - sec x tan : + stan +1 - (1+ tan *x) = 0 Ztan 3x = 0 tan 3x = 0 3X = 0, T $\chi = 0$, $\sqrt{3}$
- (49) 2511 x COSX = 1 2 (1-cos2x)-cosx = 1 $2\cos^2 x + \cos x - 2 - 1 = 0$ 2 cos 2 x + cos x - 3 = 0 (2005 x +3) (005 x -1)=0 $\cos x = \frac{-3}{2}$ $\cos x = 1$ 0,21 G.
 - (46) 3 sec x + 4 cos 2x = 7 $\frac{3}{\cos^2 x} + \frac{4\cos^4 x}{\cos^2 x} = \frac{7\cos^2 x}{\cos^2 x}$ 405 1x - 7 cos2x+3=0 $(405^{2}x-3)(05^{2}x-1)=0$ COSX = = 13/4 cosx = = 1 TT, 217 10 3 csc2 x = 4
 - SIN X = 3/4 5111X= + 53/2 M3, 27/3 41/3, 51/3