

3. $\sin^2 \theta \cos^2 \theta - \cos^2 \theta$ Sin 20+(0520=1 $(05^{2} \Theta(5) - 1)$ $(05^{2} \Theta(-cos^{2} \Theta))$ Sin26 = 1 - COS2 ______ $(1-cos^{2}\theta)^{4}cos^{2}\theta - cos^{2}\theta$ -cos464. $(\sin x + \cos x)^2 + (\sin x - \cos x)^2$ (sinx-cosx)(sinx-cosx) Sin2x +25inxcosx + cos2x + sin2x -25inxcosx + cos2x + $25in^{2}x+2cos^{2}x$ $2(sin^{2}x+cos^{2}x)$ $2\cdot 1$

5. $(1 + \cos\theta)(\csc\theta - \cot\theta)$ $\frac{(1+\cos\theta)\left(\frac{1}{\sin\theta}-\frac{\cos\theta}{\sin\theta}\right)}{\left(\frac{1-\cos\theta}{\sin\theta}\right)} \frac{(3(\theta-\cot\theta+\cos\theta))(x,\theta-\cos\theta)}{(5(\theta-\cot\theta+\cos\theta))(x,\theta-\cos\theta)} \frac{1}{\sin\theta} - (05\theta\frac{\cos\theta}{\sin\theta}) \frac{1}{\sin\theta} - (05\theta\frac{\cos\theta}{\sin\theta}) \frac{1-\cos^{2}\theta}{\sin^{2}\theta} \frac{1}{\sin^{2}\theta} - (01\theta+\cos\theta-\cos\theta) \frac{1}{\sin^{2}\theta} \frac{1-\cos^{2}\theta}{\sin^{2}\theta} \frac{1}{\sin^{2}\theta} - (01\theta+\cos\theta-\cos\theta) \frac{1}{\sin^{2}\theta} \frac{1}{\sin^{2}\theta} \frac{1}{\sin^{2}\theta} \frac{1}{\sin^{2}\theta} - (01\theta+\cos^{2}\theta) \frac{1}{\sin^{2}\theta} \frac{1}{\sin$ $\frac{1}{5.56} - coto + coto - \frac{cos^2 6}{5in\theta}$ 5.-20 -cos24 Sind Sint

Sinx-sinxcost + Sinx +sinxcosx -cos x 1-cos x SinX-SinXCOSX+SinX+SinX+SinXCOSX $1 - (05^2 \times$ 2 sinx Sin2x $in \chi = \chi(s)$

5120+(0520=) 6. $\cos^4\theta + 2\cos^2\theta \sin^2\theta \neq \sin^4\theta$ (05.20 = |- sin20 (0520 (cos26 + 25m26) (5in 40) $(1-\sin^2\theta)(1-\sin^2\theta+2\sin^2\theta)-\sin^2\theta$ 5,26 4,26 $(|-\sin^{2}\theta)(|+\sin^{2}\theta) - \sin^{4}\theta (|-\cos^{2}\theta)(|-\cos^{2}\theta)$ - (1-2cost+cos46) - sin 40 - sin 40 -2sin40

 $\chi^{4} + \chi^{2} + |^{4}$ $X^{\prime} + Q_{X} + 1$ $\left(\chi^{2}+1\right)\left(\chi^{2}+1\right)$ $(\chi + I)(\chi + I)$ $(\chi + I)^{2}$

6. $\cos^4\theta + 2\cos^2\theta \sin^2\theta + \sin^4\theta$ $\frac{(\cos^2\theta + \sin^2\theta)(\cos^2\theta + \sin^2\theta)}{(\cos^2\theta + \sin^2\theta)} = \frac{(\cos^2\theta + \sin^2\theta)}{(\cos^2\theta + \sin^2\theta)}$