$$\frac{\cot A}{\tan A} = \frac{\cot A}{\frac{1}{\cot A}} = \cot A \cdot \frac{\cot A}{1} = \cot^2 A$$

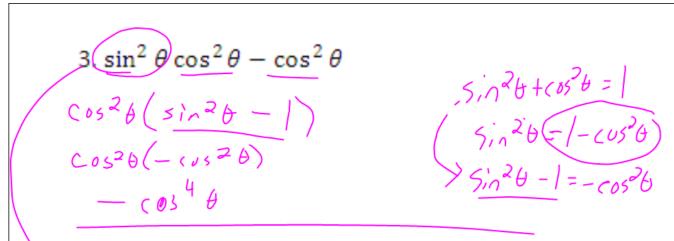
$$\frac{\cos A}{\sin A} = \frac{\cos A}{\sin A} \cdot \frac{\cos A}{\sin A} = \frac{\cos A}{\sin A} = \cot^2 A$$

2. $\cos x + \sin x \tan x$

$$\frac{\cos x}{\cos x} = \frac{\cos x}{\cos x} + \frac{\sin^2 x}{\cos x}$$

$$\frac{\cos^2 x}{\cos x} + \frac{\cos^2 x}{\cos x}$$

$$\frac{\cos^2 x}{\cos x} + \frac{\sin^2 x}{\cos x}$$



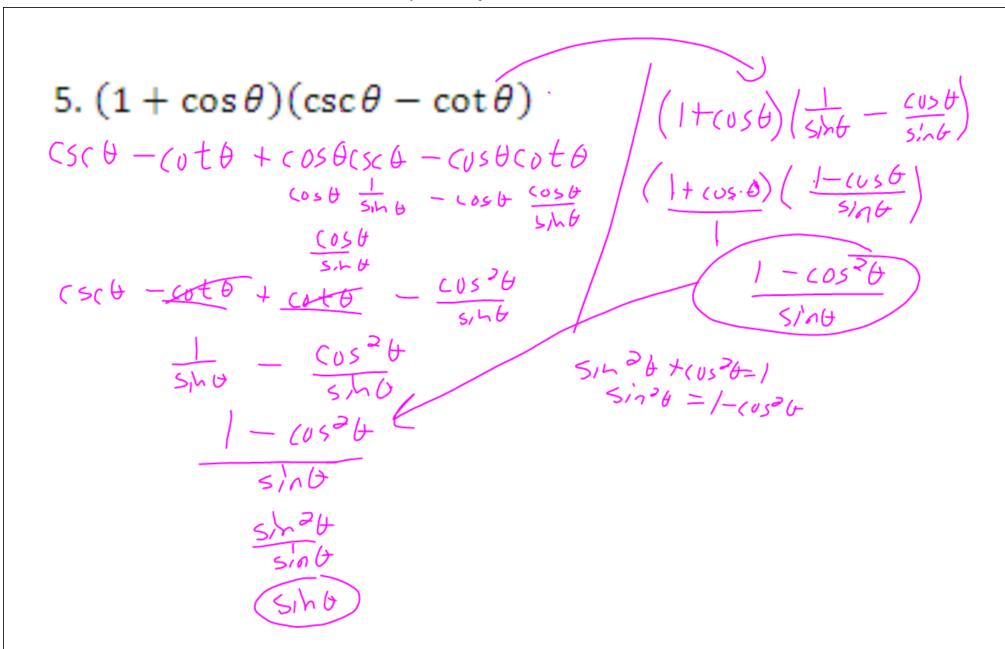
$$(05^{2}\theta) \cos^{2}\theta - (05^{2}\theta)$$

$$(05^{2}\theta) - (05^{4}\theta) - (05^{2}\theta)$$

$$- (05^{4}\theta)$$

4.
$$(\sin x + \cos x)^2 + (\sin x - \cos x)^2$$

 $(\sin x + \cos x)(\sin x - \cos x)$
 $(\sin x + \cos x)(\sin x - \cos x)$
 $(\sin x + \cos x)^2 + (\sin x - \cos x)^2$
 $(\sin x - \cos x)$
 $(\cos x)$



$$\frac{|-\cos x|}{|-\cos x|} + \frac{\sin x}{|-\cos x|} + \frac{|+\cos x|}{|+\cos x|}$$

$$\frac{|-\cos x|}{|+\cos x|} + \frac{|+\cos x|}{|+\cos x|}$$

$$\frac{|-\cos x|}{|+\cos x|} + \frac{|+\cos x|}{|+\cos x|}$$

$$\frac{|-\cos x|}{|+\cos x|} + \frac{|+\cos x|}{|+\cos x|}$$

$$\frac{|-\cos x|}{|-\cos x|} + \frac{|+\cos x|}{|-\cos x|}$$

$$\frac{|-\cos x|}{|-\cos x|} + \frac{|+\cos x|}{|-\cos x|}$$

$$\frac{|-\cos x|}{|-\cos x|} + \frac{|-\cos x|}{|-\cos x|}$$

$$\frac{|-\cos x|}{|-\cos x|} + \frac{|-\cos x|}{|-\cos x|}$$

$$\frac{|-\cos x|}{|-\cos x|}$$

5m26+cos36=1

6.
$$\cos^4\theta + 2\cos^2\theta \sin^2\theta = \sin^4\theta \cos^2\theta = 1-\sin^2\theta$$

$$\frac{\cos^{2}\theta \left(\cos^{2}\theta + 2\sin^{2}\theta\right) - \sin^{4}\theta}{\left(1-\sin^{2}\theta\right)\left(1-\sin^{2}\theta + 2\sin^{2}\theta\right) - \sin^{4}\theta}$$

$$\frac{\left(1-\sin^{2}\theta\right)\left(1-\sin^{2}\theta + 2\sin^{2}\theta\right) - \sin^{4}\theta}{\left(1-\sin^{2}\theta\right)\left(1+\sin^{2}\theta\right) - \sin^{4}\theta}$$

$$\frac{\left(1-\sin^{2}\theta\right)\left(1+\sin^{2}\theta\right) - \sin^{4}\theta}{\left(1-\sin^{2}\theta\right)\left(1+\sin^{2}\theta\right) - \sin^{4}\theta}$$

$$\begin{array}{c|cccc} & \times^2 + 2 \times + 1 & \times^4 + 2 \times^2 + 1 \\ & \times + 1)(\times + 1) & (\chi^2 + 1)(\chi^2 + 1) \end{array}$$

6. $\cos^4\theta + 2\cos^2\theta\sin^2\theta + \sin^4\theta$

$$(\cos^2\theta + \sin^2\theta)(\cos^2\theta + \sin^2\theta)$$