10. $\cot^2 x - \tan^2 x = 0$

$(\cot x - \tan x)(\cot x + \tan x) = 0$

$(\cot x - \tan x) = 0$ $\quad$ $(\cot x + \tan x) = 0$

$\frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$ $\quad$ ↓ No Solution

13. $\sec^4 x - 2\sec^2 x \tan^2 x + \tan^4 x = \tan^2 x$

$x^4 - 2x^2y^2 + y^4$

$(x^2 - y^2)^2 = y^2$

$(\sec^2 x - \tan^2 x)^2 = \tan^2 x$

$(\cancel{\tan^2 x} + 1 - \cancel{\tan^2 x})^2 = \tan^2 x$

$\sqrt{1} = \sqrt{\tan^2 x}$

$\pm 1 = \tan x$

$\frac{\pi}{4}, \frac{3\pi}{4}, \frac{5\pi}{4}, \frac{7\pi}{4}$

12. $1+\tan^2 x+\tan^4 x=1$

$\tan^4 x+\tan^2 x=0$

$\tan^2 x(\tan^2 x+1)$

$\sqrt{\tan^2 x}=\sqrt{0}$ | $\tan^2 x+1\cdot 0$

$\tan x=0$ | $\sqrt{\tan^2 x}=\sqrt{-1}$

$x=0,\pi$ | no solution