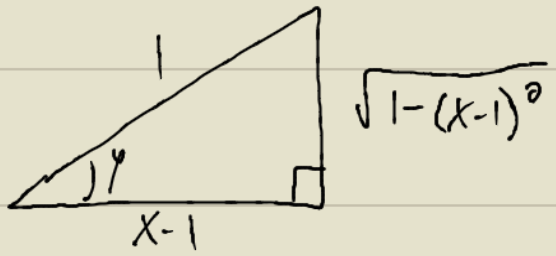
9.



$\tan y = \frac{opp}{adj}$

$= \frac{\sqrt{1-(x-1)^2}}{x-1}$

10. $\csc y = \frac{hyp}{opp} = \frac{1}{\sqrt{1-(x-1)^2}}$

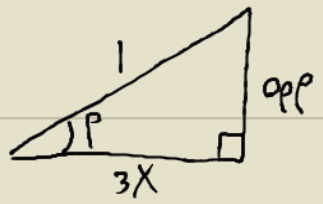
11. $\sec(\arccos 3x)$

$\theta = \arccos 3x$

$\cos\theta = \cos(\arccos 3x)$

$\cos\theta = \frac{3x}{1}$

AND cos is $\frac{adj}{hyp}$



$opp^2 + adj^2 = hyp^2$

$opp^2 + (3x)^2 = 1^2$

$opp^2 + 9x^2 = 1$

$opp^2 = 1 - 9x^2$

$opp = \sqrt{1-9x^2}$

So SEC is $\frac{hyp}{adj}$

$\frac{1}{3x}$

$\sec(\arccos 3x)$

$= \frac{1}{\cos(\arccos 3x)}$

$= \frac{1}{3x}$