

7. $\text{SEC}(\text{ARCTAN}(-\frac{4}{3}))$

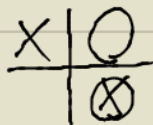
① $P = \text{ARCTAN}(-\frac{4}{3})$

$\text{TAN } P = \text{TAN}(\text{ARCTAN}(-\frac{4}{3}))$

$\text{TAN } P = -\frac{4}{3}$

AND

$\text{TAN IS } \frac{y}{x}$



QIV

②

SEC IS $\frac{r}{x}$

SO

$\frac{5}{3}$

So $y = -4, x = 3$

$r = \sqrt{x^2 + y^2}$

$r = \sqrt{3^2 + (-4)^2}$

$r = \sqrt{9 + 16}$

$r = \sqrt{25}$

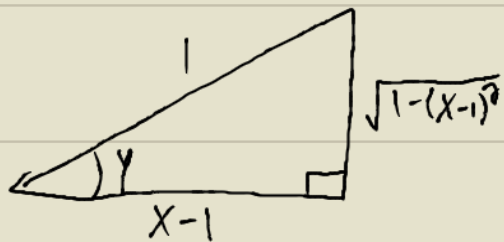
$r = 5$

8. $y = \arccos(x-1)$

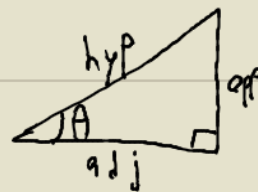
$\cos y = \cos[\arccos(x-1)]$

$\rightarrow \cos y = x-1$

$\cos y = \frac{x-1}{1}$



$\cos y = (x-1)$



$\cos \theta = \frac{\text{adj}}{\text{hyp}}$

$\sin \theta = \frac{\text{opp}}{\text{hyp}}$

$\text{hyp}^2 = \text{opp}^2 + \text{adj}^2$

$\text{TAN } \theta = \frac{\text{opp}}{\text{adj}}$

$\text{SEC } \theta = \frac{\text{hyp}}{\text{adj}}$

$\text{CSC } \theta = \frac{\text{hyp}}{\text{opp}}$

$\text{COT } \theta = \frac{\text{adj}}{\text{opp}}$

$\text{hyp}^2 = \text{opp}^2 + \text{adj}^2$

$1^2 = \text{opp}^2 + (x-1)^2$

$1 - (x-1)^2 = \text{opp}^2$

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