7. $f(x) = \text{ARCCOT } x \quad \underset{x}{(1}, \underset{y}{\frac{\pi}{4}})$

① $f'(x) = \frac{-1}{1+x^2}$

② $m = \frac{-1}{1+1^2}$

$m = \frac{-1}{2}$

③ $y = mx+b$

$\frac{\pi}{4} = -\frac{1}{2}(1)+b$

$\frac{\pi}{4} = -\frac{1}{2}+b$

$\frac{\pi}{4}+\frac{1}{2} = b$

$\frac{\pi}{4}+\frac{2}{4} = b$

$\frac{\pi+2}{4} = b$

④ $y = mx+b$

$y = -\frac{1}{2}x + \frac{\pi+2}{4}$