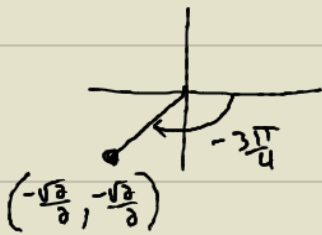


3.  $\sin^{-1}(\cot(-\frac{3\pi}{4}))$

OUTER                  INNER



$\cot$  IS  $\frac{x}{y}$   
 ~~$\cot$~~  IS 1

$\sin^{-1}(1)$

$P = \sin^{-1}(1)$

$\sin P = \sin(\sin^{-1}(1))$

$\sin P = 1$

$P = \frac{\pi}{2}$

INVERSE TRIG FUNCTION OF A TRIG FUNCTION

① FIND THE VALUE OF INNER

② SET EQUAL TO P

③ ELIMINATE THE INVERSE TRIG FUNCTION

④ NOW FIND VALUE

6.  $\cot^{-1}(-\sqrt{3})$

$P = \cot^{-1}(-\sqrt{3})$

$\cot P = \cot(\cot^{-1}(-\sqrt{3}))$

$\cot P = -\sqrt{3}$

$P = \frac{5\pi}{6}$



Q II

7.  $\csc^{-1}(-\sqrt{2})$

$P = \csc^{-1}(-\sqrt{2})$

$\csc P = \csc(\csc^{-1}(-\sqrt{2}))$

$\csc P = -\sqrt{2}$

$\frac{1}{\sin P} = \frac{-\sqrt{2}}{1}$

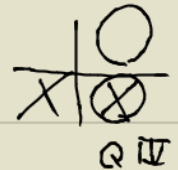
$\frac{\sin P}{1} = \frac{-1}{\sqrt{2}}$

$\sin P = \frac{-\sqrt{2}}{2}$

$P = \frac{7\pi}{4}$

$= \frac{7\pi}{4} - 2\pi$

$= \frac{-\pi}{4}$



Q IV

$\frac{x}{y}$