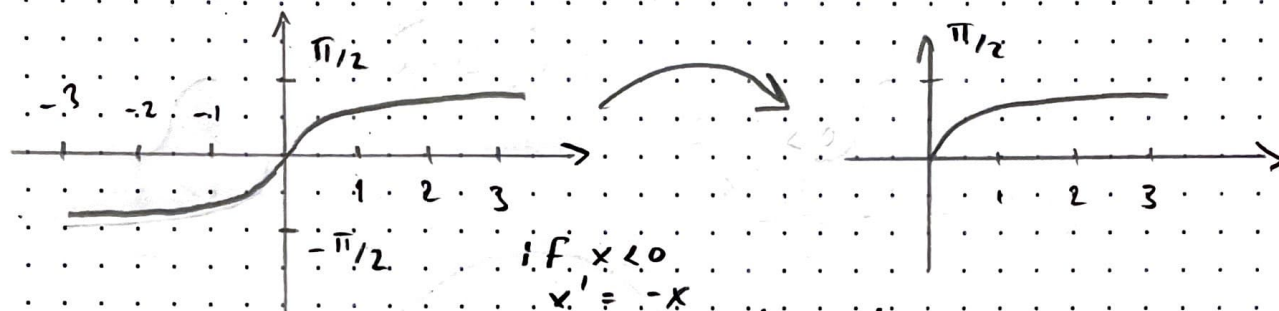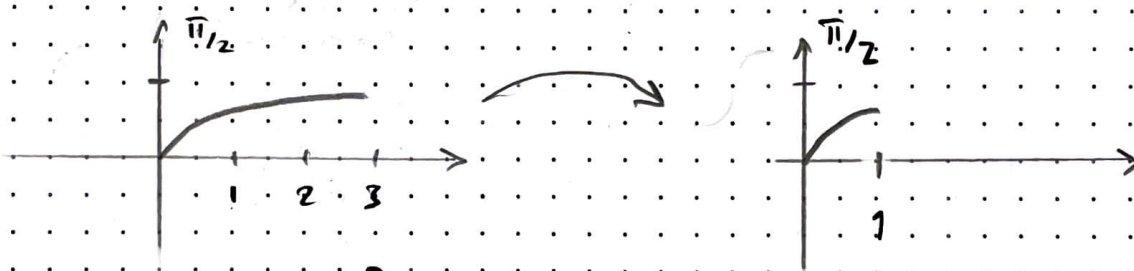2 (c) Identities:

1: $\arctan(-x) = -\arctan(x)$

2: $\arctan\left(\frac{1}{x}\right) = \frac{\pi}{2} - \arctan(x)$, $x > 0$

$\leftrightarrow$ $\arctan(x) = \frac{\pi}{2} - \arctan\left(\frac{1}{x}\right)$

if $x < 0$
$x' = -x$
return $\arctan x'$

if $x > 1$
$x' = 1/x$
return $\frac{\pi}{2} - \arctan(x')$
else
return $\arctan(x)$