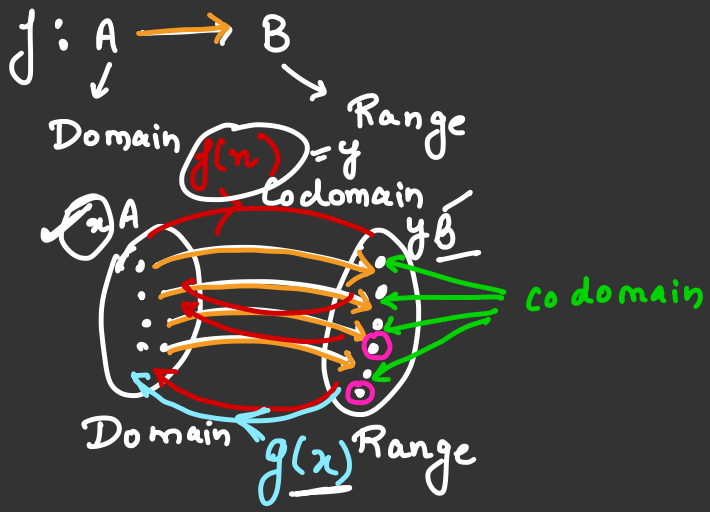
Inverse Trigonometric Functions

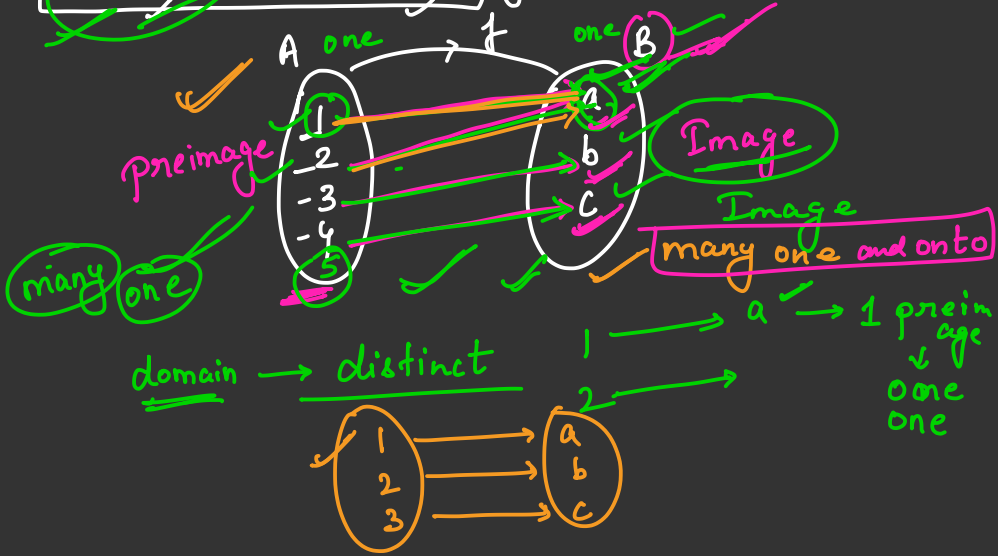
Invertible $f(x)$:-



$y = f(x)$

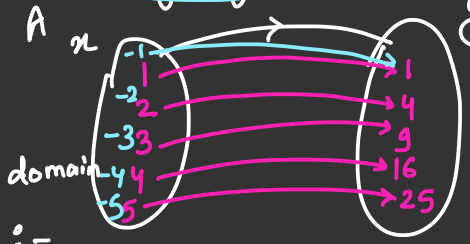
$g : B \longrightarrow A$

One-One and Onto fn → Invertible fn.



$y = f(x) = x^2$

1, 2, 3, 4



One One :-

* → Every element in domain has unique & distinct image in co-domain.

Onto fn :-

* → If every element in co domain has some preimage in domain.

$f(x) = \sin(x)$:—

$f(x): R \to [-1, 1]$

0.0001

x angle(θ)	0°	30°	45°	60°	90°
y = f(x) sin(θ)	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
cos(θ)	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0

$2\pi + \frac{\pi}{2} = \frac{4\pi + \pi}{2} = \frac{5\pi}{2}$