UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO

FACULTAD DE INGENIERÍA

PROFESOR: Francisco Javier Montoya Cervantes

ÁLGEBRA

Tarea: Identificación de funciones trigonométricas en ángulos de 30°, 45° y 60°

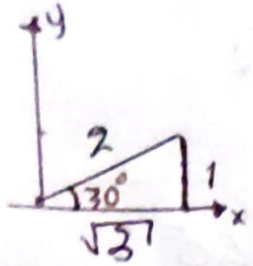
Alumno: Francisco Ubimael Ojeda Estrada.

Semestre 2023-1 **Grupo: 32**

Evaluación

Fecha de entrega: 08/12/2022 **Firma**

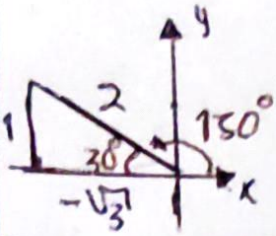
Ángulos múltiplos del ángulo de referencia de 30°



$\sin 30° = 1/2$ $\quad \csc 30° = 2$

$\cos 30° = \sqrt{3}/2$ $\quad \sec 30° = 2/\sqrt{3}$

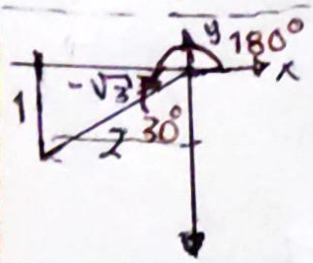
$\tan 30° = 1/\sqrt{3}$ $\quad \cot 30° = \sqrt{3}$

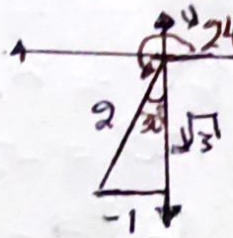


$\sin 150° = 1/2$ $\quad \csc 150° = 2$

$\cos 150° = -\sqrt{3}/2$ $\quad \sec 150° = -2/\sqrt{3}$

$\tan 150° = -1/\sqrt{3}$ $\quad \cot 150° = -\sqrt{3}$

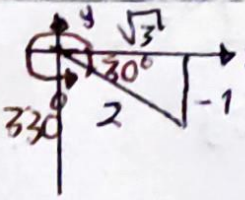




$\sin 240° = -1/2$ $\quad \csc 240° = -2$

$\cos 240° = -\sqrt{3}/2$ $\quad \sec 240° = -2/\sqrt{3}$

$\tan 240° = 1/\sqrt{3}$ $\quad \cot 240° = \sqrt{3}$

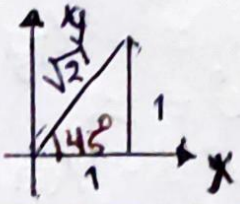


$\sin 330° = -1/2$ $\quad \csc 330° = -2$

$\cos 330° = \sqrt{3}/2$ $\quad \sec 330° = 2/\sqrt{3}$

$\tan 330° = -1/\sqrt{3}$ $\quad \cot 330° = -\sqrt{3}$

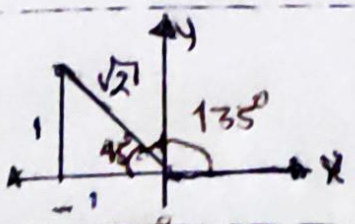
Ángulos múltiplos del ángulo de referencia de 45°



$\sin 45° = 1/\sqrt{2}$ $\quad \csc 45° = \sqrt{2}$

$\cos 45° = 1/\sqrt{2}$ $\quad \sec 45° = \sqrt{2}$

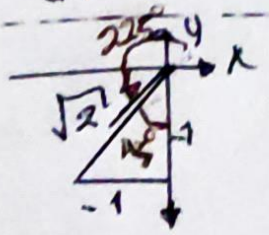
$\tan 45° = 1$ $\quad \cot 45° = 1$



$\sin 135° = 1/\sqrt{2}$ $\quad \csc 135° = \sqrt{2}$

$\cos 135° = -1/\sqrt{2}$ $\quad \sec 135° = -\sqrt{2}$

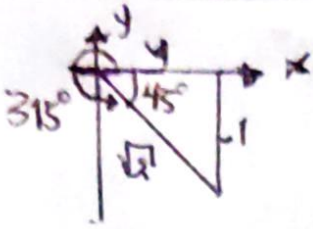
$\tan 135° = -1$ $\quad \cot 135° = -1$



$\sin 225° = -1/\sqrt{2}$ $\quad \csc 225° = -\sqrt{2}$

$\cos 225° = -1/\sqrt{2}$ $\quad \sec 225° = -\sqrt{2}$

$\tan 225° = 1$ $\quad \cot 225° = 1$

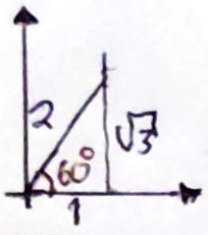


$\sin 315° = -1/\sqrt{2}$ $\quad \csc 315° = -\sqrt{2}$

$\cos 315° = 1/\sqrt{2}$ $\quad \sec 315° = \sqrt{2}$

$\tan 315° = -1$ $\quad \cot 315° = -1$

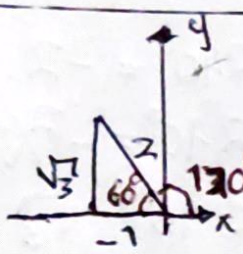
Ángulos múltiplos del ángulo de referencia de 60°



$\sin 60° = \sqrt{3}/2$ $\quad \csc 60° = 2/\sqrt{3}$

$\cos 60° = 1/2$ $\quad \sec 60° = 2$

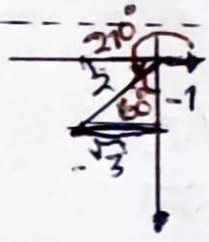
$\tan 60° = \sqrt{3}$ $\quad \cot 60° = 1/\sqrt{3}$



$\sin 120° = \sqrt{3}/2$ $\quad \csc 120° = 2/\sqrt{3}$

$\cos 120° = -1/2$ $\quad \sec 120° = -2$

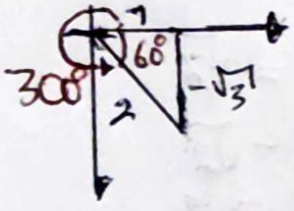
$\tan 120° = -\sqrt{3}$ $\quad \cot 120° = -1/\sqrt{3}$



$\sin 210° = -\sqrt{3}/2$ $\quad \csc 210° = -2/\sqrt{3}$

$\cos 210° = -1/2$ $\quad \sec 210° = -2$

$\tan 210° = \sqrt{3}$ $\quad \cot 210° = 1/\sqrt{3}$



$\sin 300° = -\sqrt{3}/2$ $\quad \csc 300° = -2/\sqrt{3}$

$\cos 300° = 1/2$ $\quad \sec 300° = 2$

$\tan 300° = -\sqrt{3}$ $\quad \cot 300° = -1/\sqrt{3}$