

Date
12/05/2020

TEACHING OF MATHEMATICS

D. Ed. Ed. IVth Sem

Topic - त्रिकोणमिती

Period - Ist

(270° - θ)

$$\sin(270^\circ - \theta) = -\cos \theta$$

$$\cos(270^\circ - \theta) = -\sin \theta$$

$$\tan(270^\circ - \theta) = \cot \theta$$

$$\csc(270^\circ - \theta) = -\sec \theta$$

$$\sec(270^\circ - \theta) = -\csc \theta$$

$$\cot(270^\circ - \theta) = -\tan \theta$$

(270° + θ)

$$\sin(270^\circ + \theta) = -\cos \theta$$

$$\cos(270^\circ + \theta) = \sin \theta$$

$$\tan(270^\circ + \theta) = -\cot \theta$$

$$\csc(270^\circ + \theta) = -\sec \theta$$

$$\sec(270^\circ + \theta) = \csc \theta$$

$$\cot(270^\circ + \theta) = -\tan \theta$$

(360° - θ)

$$\sin(360^\circ - \theta) = -\sin \theta$$

$$\cos(360^\circ - \theta) = \cos \theta$$

$$\tan(360^\circ - \theta) = -\tan \theta$$

$$\csc(360^\circ - \theta) = -\csc \theta$$

$$\sec(360^\circ - \theta) = \sec \theta$$

$$\cot(360^\circ - \theta) = -\cot \theta$$

(360° + θ)

$$\sin(360^\circ + \theta) = \sin \theta$$

$$\cos(360^\circ + \theta) = \cos \theta$$

$$\tan(360^\circ + \theta) = \tan \theta$$

$$\csc(360^\circ + \theta) = \csc \theta$$

$$\sec(360^\circ + \theta) = \sec \theta$$

$$\cot(360^\circ + \theta) = \cot \theta$$

Example

$\sin 135^\circ$ का मान ज्ञात करो।

Solution

$$\sin 135^\circ$$

$$\sin 135 = \sin (90 + 45)$$

$$= \sin 45^\circ$$

$$= \frac{1}{\sqrt{2}} \text{ Ans}$$

Example -2

यदि $A = 15^\circ$ तो $\cos 3A$ का मान निकालो।

Solution

$$A = 15^\circ$$

$$\cos 3A = \cos 3 \times 15^\circ$$

$$= \cos 45^\circ$$

$$= \frac{1}{\sqrt{2}} \text{ Ans}$$

Qm-1

$\tan 135^\circ$ का मान ज्ञात करो।

Qm-2

$\sec 120^\circ$ का मान ज्ञात करो।