

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

Write the correct answer for each of the following:

i. Which of the following is not a trigonometric identity?

(a) $\sec^2 \theta - \tan^2 \theta = 1$

(b) $\cos \sec^2 \theta - \sin^2 \theta = 1$

(c) $\cot^2 \theta - \cos \sec^2 \theta = -1$

(d) $1 - \cos^2 \theta = \sin^2 \theta$

Sol.

ii. The value of the expression $\frac{1}{2} \tan 60^\circ - \sin 60^\circ + 2 \cos 60^\circ$ is

(a) $\frac{1}{2}$

(b) 2

(c) 1

(d) 0

Sol.

iii. The value of $(\tan 1^\circ \tan 2^\circ \tan 3^\circ \dots \tan 89^\circ)$ is

(a) 0

(b) 1

(c) 2

(d) $\frac{1}{2}$

Sol.
