

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

Multiple Choice Questions

1. If $\sin \alpha = \frac{1}{\sqrt{2}}$ and $\sin \beta = 1$, then the value of $\cos(\beta - \alpha)$ is

(a) 0°

(b) 1

(c) $\frac{1}{\sqrt{2}}$

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

Sol.

2. If $2 \tan \theta = 1$, then $\left(\frac{2 \sin \theta - \cos \theta}{2 \sin \theta + \cos \theta} \right)$ is equal to

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

(b) 1

(c) 0

(d) $\frac{1}{4}$

Sol.

3. If $3 \cot \theta = 5$, then $\left(\frac{8 \sin \theta + 3 \cos \theta}{8 \sin \theta - 3 \cos \theta} \right)$ is equal to

(a) $\frac{13}{5}$

(b) $\frac{13}{3}$

(c) $\frac{5}{13}$

(d) $\frac{3}{13}$

Sol.

4. $\frac{1 + \tan^2 A}{1 + \cot^2 A} =$

(a) $\sec^2 A$

(b) -1

(c) $\cot^2 A$

(d) $\tan^2 A$

Sol.