

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

Multiple Choice Questions

1. The value of the expression $\frac{\tan^2 25^\circ - \cot 65^\circ \tan 25^\circ}{\sin^2 25^\circ + \sin^2 65^\circ}$ is
- (a) 0 (b) 1
(c) $\frac{1}{4}$ (d) $\frac{1}{2}$

Sol.

2. $\sin(45^\circ + \theta) - \cos(45^\circ - \theta)$ is equal to
- (a) $2\cos \theta$ (b) 0
(c) $2\sin \theta$ (d) 1

Sol.

3. If $\sin \theta - \cos \theta = 0$, then the value of $(\sin^2 \theta + \cos^2 \theta)$ is
- (a) 1 (b) $\frac{3}{4}$
(c) $\frac{1}{2}$ (d) $\frac{1}{4}$

Sol.

4. Given that $\sin \alpha = \frac{\sqrt{3}}{2}$ and $\cos \beta = \frac{1}{2}$, value of $(\alpha - \beta)$ is
- (a) 0° (b) 60°
(c) 90° (d) 120°

Sol.
