

4. Solve the formula in terms of E: $\sec\theta = \frac{1}{ER^2}$

a) $E = \frac{1 \cos\theta}{R^2}$

b) $E = \frac{1 \sec\theta}{R^2}$

c) $E = \frac{1R^2}{\sec\theta}$

d) $E = \frac{1R^2}{\cos\theta}$

5. Find the exact value of $\tan\theta$, if $\sin\theta = \frac{1}{2}$ and $0^\circ < \theta < 90^\circ$

a) $\frac{\sqrt{3}}{2}$

b) $-\frac{\sqrt{3}}{2}$

c) $\frac{1}{\sqrt{3}}$

d) $-\frac{1}{\sqrt{3}}$

6. The expression $(1 + \cos\theta)(1 - \cos\theta)$ is equivalent to:

a) 1

b) $\sec^2\theta$

c) $\sin^2\theta$

d) $\csc^2\theta$

7. Find the numerical value of $\csc x$ if $\frac{\cot x}{\cos x} = 2$

a) 1

b) 2

c) 3

d) 4
