

Trigonometric Functions Worksheets

1. Finding Trig Ratios

- In a right triangle with opposite side = 3, adjacent side = 4, and hypotenuse = 5, find \sin , \cos , and \tan .
- Answers: $3/5$, $4/5$, $3/4$

2. Reciprocal Trig Functions

- If $\sin(x) = 1/2$, find $\csc(x)$.
- If $\cos(x) = \sqrt{3}/2$, find $\sec(x)$.
- Answers: 2, $2\sqrt{3} / 3$

3. Using the Unit Circle

- Find the sine and cosine of 30° .
- Answers: $1/2$, $\sqrt{3}/2$

4. Trigonometric Identities

- Verify the identity: $\sin^2(x) + \cos^2(x) = 1$ for $x = 45^\circ$
- Answer: $(\sqrt{2}/2)^2 + (\sqrt{2}/2)^2 = 1$