

Name \_\_\_\_\_

## Unraveling Trigonometric Treasures: Finding Values for Common Angles

### Short Answer Key

1. At  $0^\circ$ , the sine is 0, the cosine is 1, and the tangent is  $0/1$ , which is also 0.
2. The sine and cosine values at  $45^\circ$  are both  $\sqrt{2}/2$  because  $45^\circ$  divides the right angle of a right triangle into two equal parts, creating an isosceles right triangle.
3. To find the tangent value at  $60^\circ$ , divide the sine value by the cosine value at  $60^\circ$ , resulting in  $\sqrt{3}$ .
4. The cosine value at  $90^\circ$  is 0.
5. The tangent value is undefined at  $90^\circ$  because division by 0 is undefined.

