

NAME: _____

P.I. A.A.42: Find the sine, cosine, and tangent ratios of an angle of a right triangle, given the lengths of the sides

1. What does the term “trigonometric ratios” mean?
2. Calculate the values of the sine and the cosine of the acute angles in several right triangles. If A and B are the acute angles in a right triangle, what can you conclude about $\sin A$ and $\cos B$?
3. Using a variety of right triangles and your calculator, determine tangents of the pairs of complementary angles in each triangle. What do you notice about the relationship of the tangent of an angle to the tangent of its complement?

[1] They are triangle measurement ratios.

[2] They are equal.

[3] They are reciprocals.