 Finding the derivatives

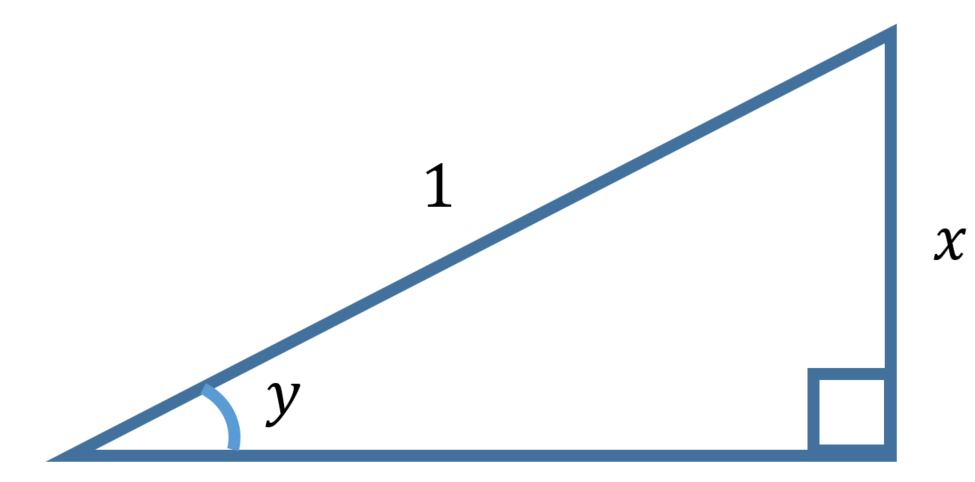
for inverse trigonometric functions

This resource has been developed to support teachers understand the technique of for differentiating inverse trigonometric functions.

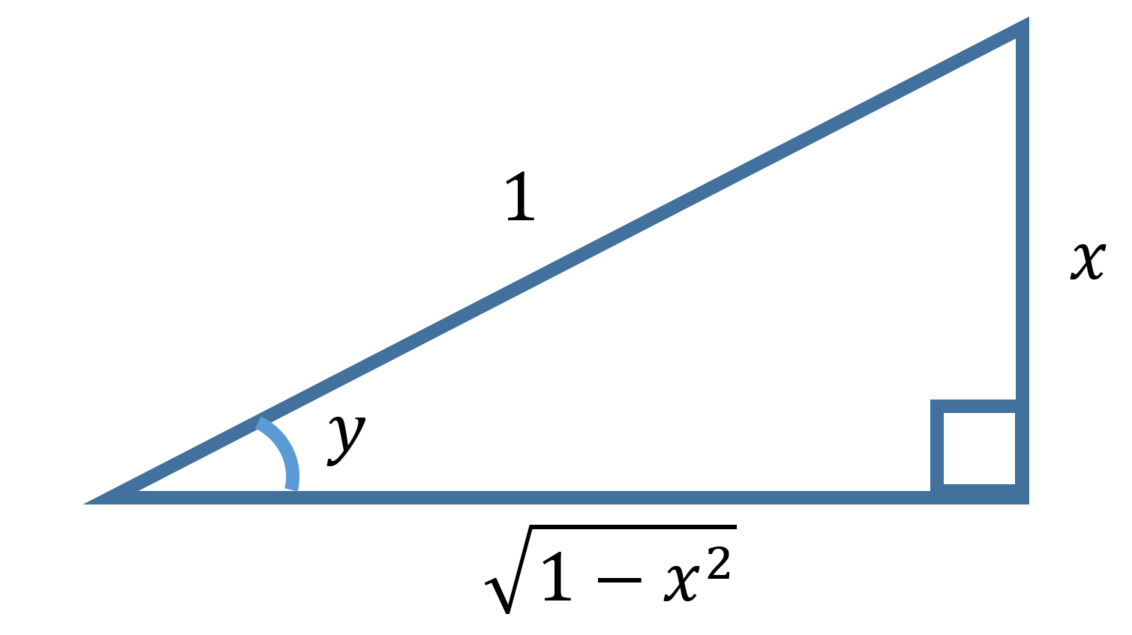
1. Find

Let

Think of and represent this as a right-angled triangle, shown below.



Find the missing side by using Pythagoras’ theorem and interpret results for and .



and

From ,

and using the result gives

Therefore

1. Using a similar technique to the one outlined above show that
   * and