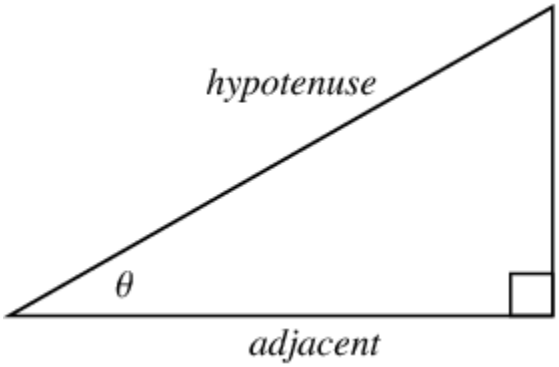
Description:

The cosine function is one of the basic trigonometry functions (others being cosecant, cotangent, secant, sine, and tangent). Let θ be an angle measured in counterclockwise from x-axis along the arc of the unit circle. Then cosθ is the horizontal coordinate of the arc endpoint.



The common schoolbook definition of the cosine of an angle θ in a right-angled triangle is given by,

$$\cos\theta = \frac{\text{adjacent}}{\text{hypotenuse}}.$$

In mathematics, the inverse trigonometric functions (also called arcus function, antitrigonometric functions or cyclometric functions) are the inverse of the basic trigonometric functions (Specifically they are the inverse of sine, cosine, tangent, cotangent, secant and cosecant functions) and are used to obtain an angle from any of the angle's trigonometric ratios.

REFERENCES:

http://mathworld.wolfram.com/Cosine.html

https://en.wikipedia.org/wiki/Inverse_trigonometric_functions