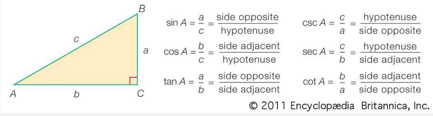
Y10 trigonometry

by deathrobotpunch via cheatography.com/215339/cs/46903/

Trigonometric Functions

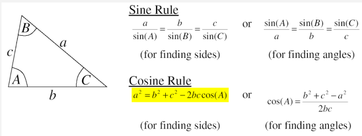


pythagoras's theorem

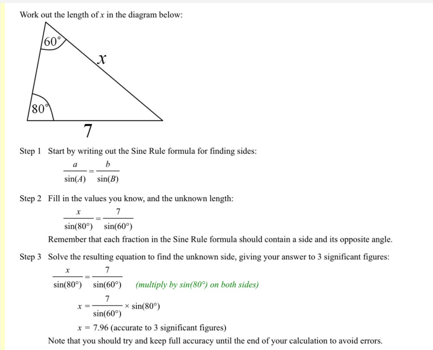
$c^2 = a^2 + b^2$	$c = \sqrt{a^2 + b^2}$
$a^2 = c^2 - b^2$	$a = \sqrt{c^2 - b^2}$
$b^2 = c^2 - a^2$	$b = \sqrt{c^2 - a^2}$

c is the hypotenuse whereas a and b can be switched interchangeably

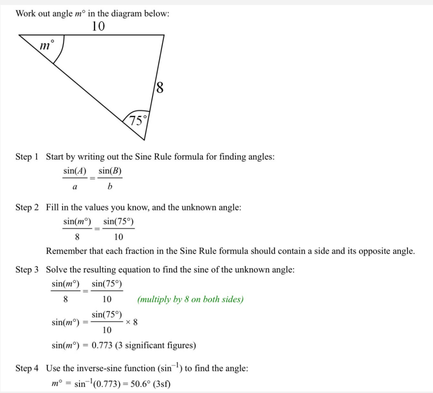
Sine and cosine rule



Sine rule finding side example



Sine rule Finding Angles example



Subtract angles of depression by 90 degrees

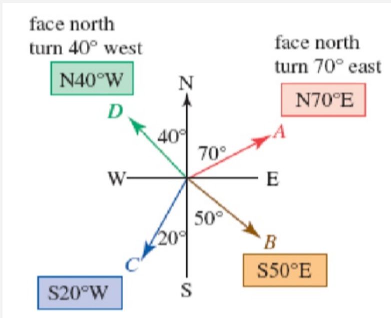
Scale Factor

Scale Factor

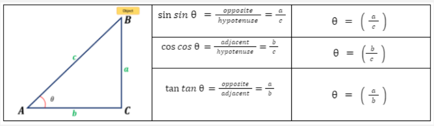
Scale factor is the ratio between the scale of a given original object and a new object, which is its representation but of a different size (bigger or smaller).

sf = larger figure dimensions ÷ smaller figure dimensions

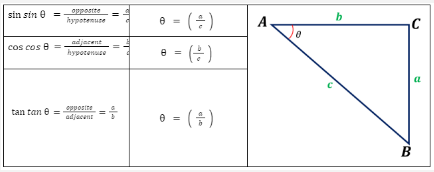
true bearings



angle of elevation example

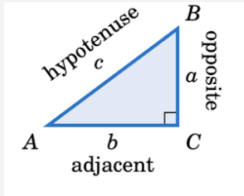


angle of depression example



Examples of Trigonometric functions

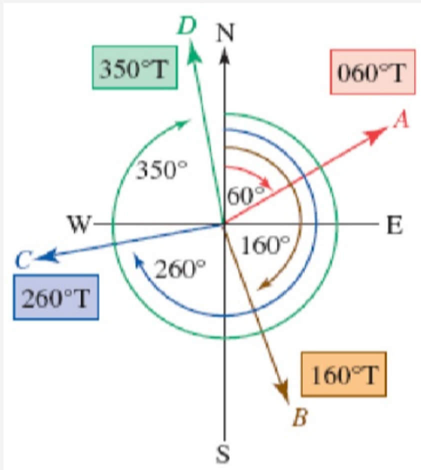
Examples of inverse functions

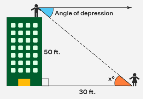


to solve A: sin-1 (a / c) or cos-1 (adjacent/hypotenuse) or tan-1 (a/b)

to solve B: sin-1 (b/c) cos-1 (a/c) tan-1 (b/a)

conventional bearings





Similarity Test for Similar Triangles