TRIG FUNCTIONS & RECIPROCALS

FUNCTION	ABBR	DEFINITION	Alternate	e DEF
sine	sin	opp/hyp		opp = opposite side adj = adjacent side
cosine	cos	adj/hyp		
tangent	tan	opp/adj	sin/cos	csc, sec and cot are called "reciprocal" trig
cosecant	csc	hyp/opp	1/sin	
secant	sec	hyp/adj	1/cos	
cotangent	cot	adj/opp	1/tan	functions !

What does "co" mean, as in co-sine?

"Co" is short for complementary.

Complement - means to complete Compliment – is something nice you say

Complementary angles are those that add up to 90°. 20° and 70° are complementary angles.

In the triangle on the right, A and B are "co" angle.

That is, $A + B = 90^{\circ}$.

If you look at the triangle, you'll see that

 $\sin A = \cos B$

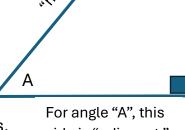
tan A = cot B (and the other way around)

This is always true for right angle triangles.

The sin of one angle will be cos of the others.

The tan of one will be the cot of the other.

The sec of one will be the csc of the other.



side is "adjacent."

For angle "A" this side

By a strange twist, cot B is both complementary to tan A and it's reciprocal.

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