Trigonometry and Calculators

This worksheet will show you how to use the calculator to find:
(a) trigonometric function values when given an angle, and
(b) angles when given trigonometric function values.

The examples will focus on two types of calculators:
(a) **Postfix calculators**: values are entered before applying the function (e.g. SHARP EL-545H calculators)... backwards to the way you see it on paper, and
(b) **Direct Algebraic Logic (D.A.L.) Calculators**: the function is entered before the value, as you see it written normally on paper (e.g. SHARP EL-5400 calculators, and the Texas Instruments graphing calculators)

Please note than the sequence of operations on your calculator may be different. If you have another model, please consult your manual.

FINDING sin, cos AND tan FROM AN ANGLE
To evaluate the trig function of an angle (be sure your calculator is in degree mode), enter the following:

Question	Postfix calculators	D.A.L. calculators
sin 30°	3 0 sin	sin 3 0 =
cos 45°	4 5 cos	cos 4 5 =
tan 60°	6 0 tan	tan 6 0 =

FINDING csc, sec AND cot FROM AN ANGLE
To evaluate one of these trig functions of an angle you need the inverse of the answer, so enter the following (The awesome power of the [Ans] key is in different locations on different calculators. Look around on yours to see where it is.):

Question	Postfix calculators	D.A.L. calculators
csc 30°	3 0 sin 1/x	sin 3 0 = 1 ÷ Ans =
sec 45°	4 5 cos 1/x	cos 4 5 = 1 ÷ Ans =
cot 60°	6 0 tan 1/x	tan 6 0 = 1 ÷ Ans =

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