

# Core Mathematics C34(GCE)

Practice Question 2

Standard A★

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**CRITICAL THINKING IS THE KEY TO SOLVE REAL WORLD PROBLEMS.  
CHILDREN MUST BE TAUGHT HOW TO THINK, NOT WHAT TO THINK.  
A GREAT TEACHER WILL BE CREATING STUDENTS TO DO NEW THINGS  
THROUGH CRITICAL THINKING, NOT SIMPLY REPEATING WHAT OTHER  
GENERATIONS HAVE DONE BEFORE. WE DO NOT NEED ANOTHER  
ALBERT EINSTEIN OR ISAAC NEWTON.... WE NEED A PERSON BETTER  
THAN THEM.**

**MR.S.V. SWARNARAJA**

# Trigonometry

**Question:**

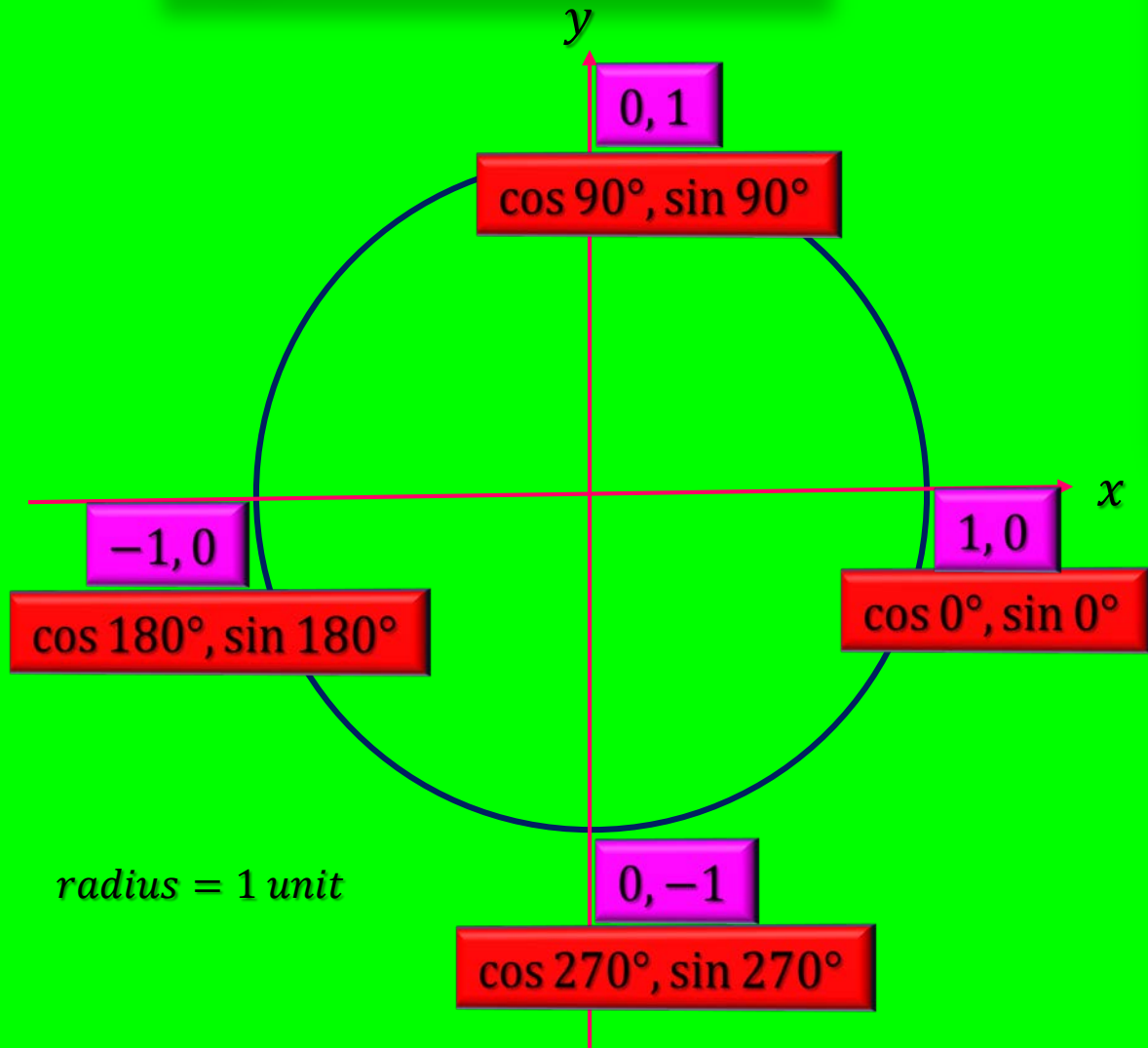
Prove that,

$$\sin^2(45 + x)^\circ + \sin^2(45 - x)^\circ \equiv 1 \quad (3 \text{ marks})$$

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# Golden Rules



$$\cos 0^\circ = 1$$

$$\sin 0^\circ = 0$$

$$\cos 90^\circ = 0$$

$$\sin 90^\circ = 1$$

$$\cos 180^\circ = -1$$

$$\sin 180^\circ = 0$$

$$\cos 270^\circ = 0$$

$$\sin 270^\circ = -1$$

Alphabetical order **C**os then **S**in  
Alphabetical order **x** then **y**

*Traditional or Online classes*

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