Solving Trigonometric Equations

Part One: Finding ALL Solutions

Recall: _____ functions are _____ therefore there are

_____ many solutions, unless the _____ is _____.

ex. Find _____ solutions of _____.

First, find the _____ angle:

Since _____ is _____, and _____ is _____ in _____,

there will be solutions in _____.

Consideration: if there is NO _____, angles can be expressed in either

_____ or _____.

QI solution: _____ every _____ that is _____ to _____ is also a _____

QII solution:

ex. Find _____ solutions of _____.

First, find the _____ angle:

Since _____ is _____ in _____,

there will be solutions in _____.

Do: Find _____ solutions of _____.

First, find the _____ angle:

_____ is _____ in _____

ex. Solve the equation _____.

Part Two: Finding Solutions When There Is a Restricted Domain

ex. Find the solutions of _____ on _____.

Use solutions from previous example:

_____ domain is in _____ therefore express _____ in _____.

ex. Find the solutions of _____ on _____.

Use solutions from previous example:

ex. Solve _____ on _____.

ex. Solve _____ on _____. let u =

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ex. Solve _____ on _____.

ex. Solve _____ on _____.

Using Reciprocals

ex. Solve _____ on _____.

Solutions in ALL Quadrants

ex. Solve _____ on _____.