

## Lesson - Euler's Identity

$$e^{j\theta} = \cos \theta + j \sin \theta$$

This relation is simply a transformation between rectangular coordinates and polar coordinates.

## Tool Box

$$e^{j\theta} = \cos \theta + j \sin \theta$$

## Example - Problem

What is  $X$ ?

$$(1 + j)X = (-1 + j)$$

## 1 Solution - Method 1

## 2 Solution - Method 2

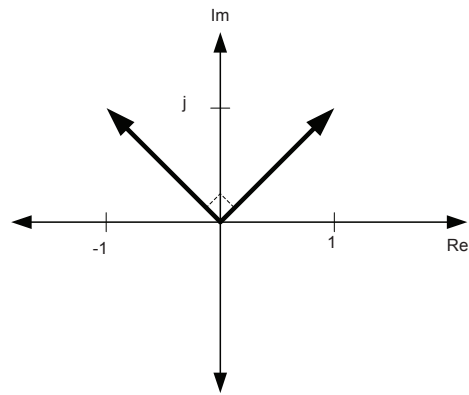


Figure 1: Figure 1