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| **OBJECTIVES** (Polar Coordinates, Section 6.4, Pages 479 – 485) |
| * Identify the major parts of the polar coordinate system: the Pole, Polar Axis, and Polar points in the form (r, *θ*).
 |
| * Understand that the Polar point (*r, θ*) has the coordinate *r,* which is the distance from the Pole and the coordinate *θ,* whichis an angular measure, either in degrees or radians.
 |
| * Understand that *(x, y)* is a Rectangular (Cartesian) point.
 |
| * Plot points in the Polar coordinate system.
 |
| * Be able to convert from (*r, θ*) to *(x, y)* by using x = rcos *θ* and y = rsin *θ.*
 |
| * Be able to convert from *(x, y)* to *(r, θ)* by using r = ±√ (x2 + y2) and *θ* = tan-1(y/x).
 |
| * Graph and identify the Common Polar Curves.
 |
| * Use a TI84+ calculator to graph polar functions.
 |
| * Convert a polar equation to rectangular form.
 |
| * Convert a rectangular equation to polar form.
 |
| * Find the distance between 2 polar coordinates by using The Law of Cosines.
 |
| **The Polar Coordinate System** consists of a ray known as the Polar Axis and the endpoint of the ray, called the Pole. |

**TUESDAY (3.25.25)**

**Discussion of the previously assigned classwork/homework:** Page 484: 51, 52.

**Class Work:** Review (6 problems) to be received and discussed in class.

**Homework:** Page 507 (#53 – 71, odds)

**THURSDAY (3.27.25)**

**Class Work/Homework:**

* Page 507 (#54 – 72, evens).
* Also, read and take notes on pages 486 – 492.
* Page 492, ***Exercises***, #3 – 6.

**FRIDAY (3.28.25) No Class, Senior Project Presentations**