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| **OBJECTIVES** \_Chapter 4: Section 4.3, *Trigonometry Extended* (Pages 331–339). |
| * Find the trigonometric functions of **any** angle, in degrees or in radians. |
| * Understand the periodic nature of the trig functions. |
| * Define the unit circle as having a center at the origin and a radius equal to one. |
| * Fill in the degrees, radians, and ordered pairs on the 16-Point Unit Circle. |
| * Use the unit circle as a schematic device. |
| * Use circular trigonometric to solve an expanded world of applications, which would be impossible with right triangle trigonometry. |

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| |  | | --- | | * Use the unit circle (with a radius of 1 unit and a center at the origin) **and** any other circle of radius, *r*, to evaluate the 6 trigonometric functions for an angle when given a point on its terminal side. | | * Use circular trigonometry to find the six trigonometric functions of an angle *θ* for which you know a point on the terminal side of angle *θ*. | | * Understand that extending trigonometric functions beyond right triangle ratios of acute angles more aptly applies to real world situations where angular measures can be any number, either positive or negative. * **Graph the sine and cosine functions.** |   **Technology: Smart** Board, graphing calculator (TI-83 or TI-84) |

**TUESDAY (5.6.25)**

* **Review:** Graph y = sin x.
* **Class Work:**

Graph the following using The Five Point Method that we discussed in class.

1. y = 2sin (3(x – 30)) o
2. y = - 2sin (3(x – 30)) o
3. y = 2sin (3(x – 30)) o + 4
4. y = - 2sin (3(x – 30)) o + 4
5. y = 3sin (6(x + 30)) o
6. y = - 3sin (6(x + 30)) o

* **All:** When you take your Final Exam: You may use your Unit Circle and 2 pages of notes, front and back, 8.5 by 11 inches
* **Seniors: Review for your Final Exam to be taken on Thursday.**
* **Underclassmen:** Graph ***y = 5sin (4(x – 10)) o – 3*** using The Five Point Method.

**THURSDAY (5.8.25)**

**Seniors: Final Exam during this class period**

**All other students: Review for your Final Exam**

**FRIDAY (5.9.25)**

**Discuss the previously assigned sine function graphs.**

**TUESDAY (5.13.25)**

**Learn how to graph the cosine function.**

**THURSDAY (5.15.25)**

* **Review for your Final Exam to be taken on Friday, 5.16.25, from 8:05 to 10:05.**