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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.
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| * 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.**
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**Technology: Smart** Board, graphing calculator (TI-83 or TI-84) |

**MONDAY (5.5.25)**

* **Seniors: Final Exam during this class period.** You may use your Unit Circle and 2 pages of notes, front and back, 8.5 by 11 inches.
* **All other students: Review for your Final Exam.**

**WEDNESDAY (5.7.25)**

* **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
* **Underclassmen:** Graph ***y = 5sin (4(x – 10)) o – 3*** using The Five Point Method.

**FRIDAY (5.9.25) B-Day, No Class**

**MONDAY (5.12.25)**

* **Discuss the previously assigned sine function graphs.**
* **Learn how to graph the cosine function.**

**WEDNESDAY (5.14.25)**

* **Review for your Final Exam on Wednesday, May 21, 10:30 – 12:30.** You may use your Unit Circle and 2 pages of notes, front and back, 8.5 by 11 inches.