

AFM Unit 3: Circle Trigonometry

Objective 2.04 Use trigonometric (sine, cosine) functions to model and solve problems; justify results.

- Solve using tables, graphs, and algebraic properties.
- Create and identify transformations with respect to period, amplitude, and vertical and horizontal shifts.

Day	Topic	Students will be able to:	Activity
1 Monday, Feb. 26	Unit 3 Day 1 Notes: Angle and Radian Measure	<ul style="list-style-type: none"> • Convert between degrees and radians. • Angles in standard position 	
2 Tuesday, Feb. 27	ACT		
3 Wednesday, Feb. 28	Unit 3 Day 2 Notes: Reference Angles and Triangles	<ul style="list-style-type: none"> • Find Reference Angles • Find 6 trig functions using Reference Triangles 	
4 Thursday, Mar. 1	Unit 3 Day 3 Notes: Arc Length and Area of a Sector	<ul style="list-style-type: none"> • Arc Length • Area of Sector • Use linear and angular speed to describe motion on a circular path. 	
5 Friday, Mar. 2	UNIT 3 QUIZ – Days 1 - 3		
6 Monday, Mar. 5	Unit 3 Day 4 Notes: The Unit Circle	<ul style="list-style-type: none"> • Intro to Unit Circle (Be ready for a quiz on the unit circle any day!) 	
7 Tuesday, Mar. 6	Unit 3 Day 4 Notes Cont.: Trig Functions of any Angle	<ul style="list-style-type: none"> • Use a unit circle to define trig functions of real numbers. • Use reference angles to evaluate trig functions. 	
8 Wednesday, Mar. 7	Unit 3 Day 5 Notes: Graphs of Sine and Cosine Functions	<ul style="list-style-type: none"> • Understand the graph of $y = \sin x$. • Understand the graph of $y = \cos x$. • Graph variations of $y = \sin x$ and $y = \cos x$. • Use vertical shifts. 	Discovery Lesson – Explore graphs of sine and cosine.
9 Thursday, Mar. 8	REVIEW		
10 Friday, Mar. 9	UNIT 3 TEST		