

Algebra 2 Honors

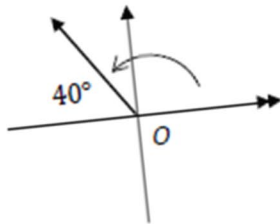
Intro to Trigonometry



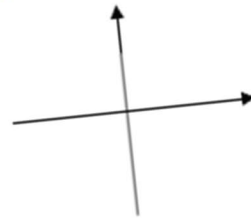
Date _____ Period _____

Lesson 11.2: Angles and the Unit Circle **Warm-Up #1**

1. Find the measure of the angle in standard position.



2. Sketch the angle 225° in standard position.



3. Find the measure of an angle between 0° and 360° that is coterminal to 420° .

Warm-Ups

11

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ALGEBRA 2 CURRICULUM

Scope and Sequence

Unit II: Introduction to Trigonometry

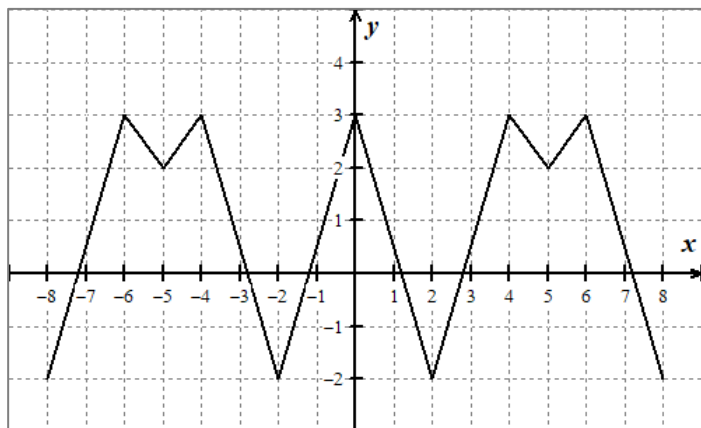
Lesson	Skills & Learning Objectives
[11.1] Exploring Periodic Data	☐ Understand periodic behavior and identify periodic functions ☐ Find amplitude and period for one cycle of a periodic function
[11.2] Angles and the Unit Circle	☐ Analyze, graph and evaluate angles in standard position ☐ Find and use coterminal angles ☐ Understand properties and behavior of positive and negative angles ☐ Make a connection between the 30-60-90 and 45-45-90 triangles and a unit circle and ratios (SOH-CAH-TOA)
[11.3] Radian Measure	☐ Find radian measure and convert between degrees and radians ☐ Find measures of intercepts arcs ☐ Use dimensional analysis for real-world conversions
[11.4] The Sine Function	☐ Use properties of sine function to graph and analyze ☐ Solve real-world applications
[11.5] The Cosine Function	☐ Use properties of cosine function to graph and analyze ☐ Solve real-world applications
[11.6] Right Triangle Trigonometry	☐ Use properties of right triangles to find all six trigonometric ratios ☐ Use special right triangle ratios to lengths of sides in a right triangle

Name _____ Date _____ Period _____

Lesson II.I: Exploring Periodic Data

Warm-Up #1

1. Determine whether each function is or is not periodic. If it is, find the period.



2. Write the pattern of x -values where the y -values are 3.

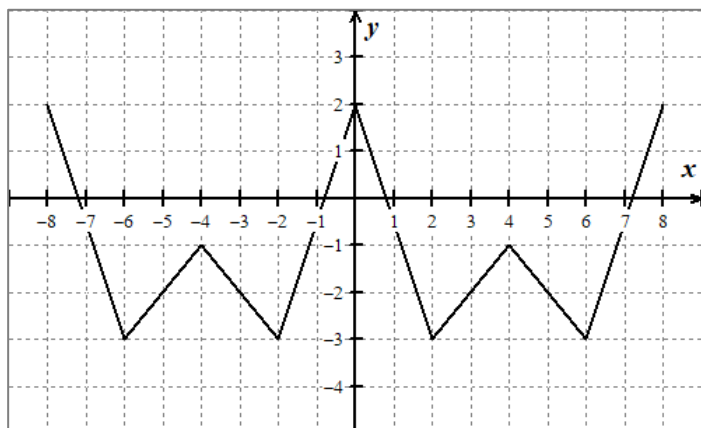
3. What is the value of the function at $x = 32$?

Name _____ Date _____ Period _____

Lesson II.I: Exploring Periodic Data

Warm-Up #2

1. Determine whether each function is or is not periodic. If it is, find the period.



2. Write the pattern of x -values where the y -values are -3 .

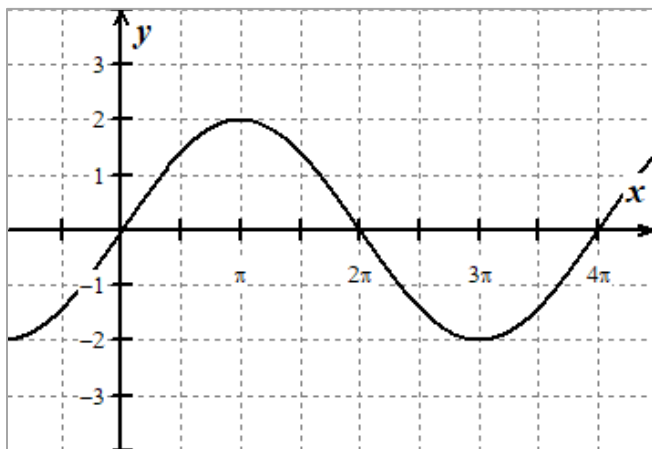
3. What is the value of the function at $x = 36$?

Name _____ Date _____ Period _____

Lesson II.4: The Sine Function

Warm-Up #1

1. State the amplitude and period of the sine function shown below $y = 2 \sin(0.5\theta)$



2. Use the graph at left to determine the y -value when $\theta = 7\pi$

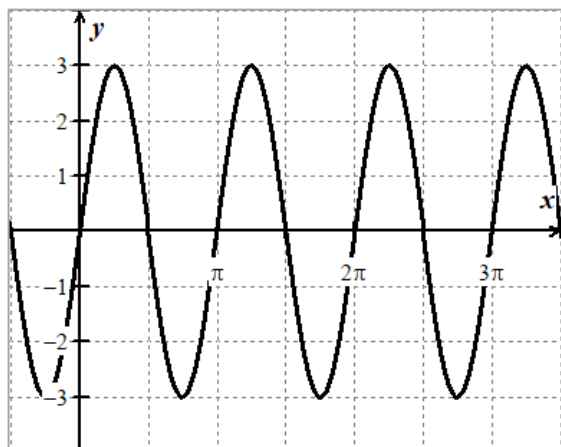
3. Use the graph at left to determine the y -value when $\theta = 6\pi$

Name _____ Date _____ Period _____

Lesson II.4: The Sine Function

Warm-Up #2

1. State the amplitude and period of the sine function shown below $y = 3 \sin(2\theta)$



2. Use the graph at left to determine the y -value when $\theta = \frac{3\pi}{4}$

3. Use the graph at left to determine the y -value when $\theta = \frac{5\pi}{4}$

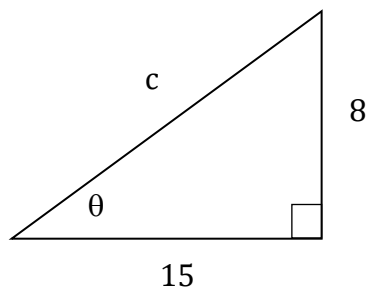
Name _____ Date _____ Period _____

Lesson II.6: Right Triangle Trigonometry

Warm-Up #1

Use the triangle below to answer the questions.

1. Find the length of the hypotenuse.



2. Find the measure of θ . Round your answer to the nearest tenth.

3. Find each of the trig functions.

$\sin \theta$

$\cos \theta$

$\tan \theta$

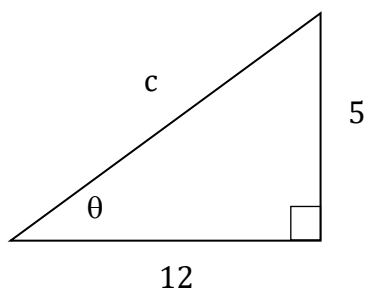
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Lesson II.6: Right Triangle Trigonometry

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