

# UNIT 14- LESSON PLANS

**Class** Algebra 2

**Topic** U14 - Trigonometric Identities

**Lesson** 1 **Of** 7

## Objective

Students will:

- Understand that trigonometric identities are related to right-angled triangles.
- Generate the six basic trigonometric identities named:
  - a.) Sine
  - b.) Cosine
  - c.) Tangent
  - d.) Cotangent
  - e.) Secant
  - f.) Cosecant
- Understand the reciprocal, Pythagorean and Quotient identities relating these six basic trigonometric identities

## "I Can" Statement

- I can write any basic trigonometric identity given a right-angled triangle

## Common Core Standards

[CCSS.MATH.CONTENT.HSG.SRT.C.6](#)

Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.

[CCSS.MATH.CONTENT.HSG.SRT.C.7](#)

Explain and use the relationship between the sine and cosine of complementary angles.

## Bell Work

Solve a quick quiz to refresh what is a hypotenuse, an adjacent, an opposite and an angle  $\theta$  of a right-angled triangle

## Procedures

1. Start and lead students discussion related to the bell work.
2. Distribute the Guided Notes

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3. Present lesson or play a video lesson.
4. Distribute Lesson Assignment.
5. Have students check each other's work.

## Assessment

Assignment 14-1

What is a right-angled triangle?

What is the hypotenuse, base and perpendicular of a right-angled triangle?

## Additional Resources

[Regents Prep online quiz](#)