

# BLOCK Unit 5 - Right Triangle Trig:

## Learning Targets and Success Criteria:

1. I can use the Pythagorean Theorem.  
I know I can because:
  - o I can find a missing leg of a right triangle.
  - o I can find a missing hypotenuse of a right triangle.
  - o I can solve real-life problems involving the side lengths of right triangles.
  
2. I can define trigonometric ratios.  
I know I can because:
  - o I can identify the sides of a right triangle as opposite, adjacent, and hypotenuse given a reference angle.
  - o I can identify the difference between sine, cosine, and tangent ratios. (SOH CAH TOA)
  - o I can find the sine, cosine, and tangent for a given angle by using the side lengths of a right triangle.
  
3. I can explain the relationship between the sine and cosine of complementary angles.  
I know I can because:
  - o I can recognize that the acute angles in a right triangle are complementary.
  - o I can identify that the sine of one acute angle is the same as the cosine of the other acute angle in a right triangle.
  
4. I solve right triangles using trigonometric ratios and the Pythagorean Theorem.  
I know I can because:
  - o I can solve for a missing side of a right triangle.
  - o I can solve for a missing angle of a right triangle.
  
5. I can solve word problems involving right triangles.  
I know I can because:
  - o I can draw a right triangle diagram that represents the scenario.
  - o I can use trig ratios to solve for the missing side or angle in the scenario.

## Day 1:

### Learning Targets and Success Criteria:

#1 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

### Introduction/Connection:

Daily 10 & Right Triangle Parts Refresher

### Direct Instruction/Guided Practice/Assessment Strategy/Assignment:

Pythagorean Theorem Graphic Organizer

Pythagorean Theorem Practice ( We do Evens together, they do Odds independently)

Pythagorean Theorem Word Problem Notes

Pythagorean Theorem Word Problems 14-6 Practice

Pythagorean Theorem Quick Practice (#'s 1-6)

**Summarizers:** Discuss and correct questions they thought were difficult.

**Homework:** None :)

## **Day 2:**

**Learning Targets and Success Criteria:**

#'s 2 & 3 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10 & SOH CAH TOA Graphic Organizer

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Trig Ratios PowerPoint

Trig Ratios Practice (I do #'s 1, 3, 5, 7 & they finish)

iXLs Q1 & R1

**Summarizers:** Discuss and correct questions they thought were difficult.

**Homework:** None :)

## **Day 3:**

**Learning Targets and Success Criteria:**

#'s 2, 3, & 4 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Missing Side Notes

Missing Side Practice

Trig Ratios and Missing Side Practice

**Summarizers**: Discuss and correct questions they thought were difficult.

**Homework**: Pythagorean Theorem Color Activity

correct questions they thought were difficult.

## **Day 4:**

**Learning Targets and Success Criteria:**

#'s 2, 3, 4, & 5 (see above)

**Standard**: MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Missing Angle Notes

Missing Angle Practice

Graphic Organizer

Solving Right Triangles Notes

Solving Right Triangles Practice

iXL R10

**Summarizers**: Discuss and correct questions they thought were difficult.

**Homework**: None :)

## **Day 5:**

**Learning Targets and Success Criteria:**

#'s 2, 3, 4, & 5 (see above)

**Standard**: MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Angles of Elevation and Depression Illustrations

Application Problems with Pictures Graphic Organizer

Right Triangle Trig Word Problem Notes

Right Triangle Trig Word Problem Practice

Trig Scavenger Hunt Color Activity

**Summarizers:** Discuss and correct questions they thought were difficult.

**Homework:** None :)

**Day 6:**

**Learning Targets and Success Criteria:**

#'s 2, 3, 4, & 5 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

8.4 Right Triangle Trig Word Problem Practice

Trig Application Problems Practice

**Summarizers:** Discuss and correct questions they thought were difficult.

**Homework:** None :)

**Day 6b:**

**Learning Targets and Success Criteria:**

#'s 2, 3, 4, & 5 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Solving Right Triangles Practice

Right Triangle Trig Word Problem Practice (#'s 1-10)

**Summarizers:** Discuss and correct questions they thought were difficult.

**Homework:** None :)

**Day 7:**

**Learning Targets and Success Criteria:**

#'s 2, 3, 4, & 5 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Right Triangle Trig Test Review 1

Right Triangle Trig Color Activity

Right Triangle Trig Test Review 2

**Summarizers:** Discuss and correct questions they thought were difficult.

**Homework:** None :)

**Day 8:**

**Learning Targets and Success Criteria:**

#'s 2, 3, 4, & 5 (see above)

**Standard:** MGSE9-12.SRT.6, 7, 8

**Introduction/Connection:**

Daily 10

**Direct Instruction/Guided Practice/Assessment Strategy/Assignment:**

Unit 4 Right Triangle Trig Test

Finish Color (Cupcake)

**Summarizers**: Discuss and correct questions they thought were difficult.

**Homework**: None :)