

Teacher / Team Name: Geometry Honors

Topic: Unit 4: Congruent Triangles (HON)

Days: 16

Subject(s): Math

Grade(s): 8th, 9th, 10th, 11th, 12th

Key Learning: Triangles and their properties will be understood and used.

Unit Essential Question(s): **How are triangles and their properties used?**

Concept:
Classifying Triangles

Concept:
Angles of Triangles

Concept:
Proving Triangles Congruent

Lesson Essential Question(s):
How can a triangle be classified by sides? (A)

How can a triangle be classified by angles? (A)

Lesson Essential Question(s):
How do you use the Triangle-Sum and Exterior-Angle Theorems? (A)

Lesson Essential Question(s):
What relationships exist between corresponding parts of congruent triangles? (A)

How do you use SSS and SAS to prove triangle congruence? (A)

How do you use ASA and AAS to prove triangle congruence? (A)

Vocabulary:
acute triangle, equiangular triangle, obtuse triangle, right triangle, equilateral triangle, isosceles triangle, scalene triangle

Vocabulary:
auxiliary line, exterior angle, remote interior, angles, flow proof

Vocabulary:
congruent, congruent polygons, corresponding parts, included angle, included sides

Concept:
Isosceles and Equilateral Triangles

Concept:
Congruence Transformations

Concept:
Triangles and Coordinate Proofs

Lesson Essential Question(s):
What are the properties of isosceles and equilateral triangles? (A)

Lesson Essential Question(s):
What transformations create an image congruent to the original figure? (A)

Lesson Essential Question(s):
How do you use coordinate geometry to perform transformations? (A)

Vocabulary:
legs, vertex, base angles

Vocabulary:
transformation, congruence, preimage, image, isometry, reflection, translation, rotation

Vocabulary:
coordinate proof

Additional Information:

Sections: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

Attached Document(s):

Vocab Report for Topic: Unit 4: Congruent Triangles (HON)

Days: 16

Subject(s): Math

Grade(s): 8th, 9th, 10th, 11th, 12th

Concept: Classifying Triangles

- acute triangle -
- equiangular triangle -
- obtuse triangle -
- right triangle -
- equilateral triangle -
- isosceles triangle -
- scalene triangle -

Concept: Angles of Triangles

- auxiliary line -
- exterior angle -
- remote interior -
- angles -
- flow proof -

Concept: Proving Triangles Congruent

- congruent -
- congruent polygons -
- corresponding parts -
- included angle -
- included sides -

Concept: Isosceles and Equilateral Triangles

- legs -
- vertex -
- base angles -

Concept: Congruence Transformations

- transformation -
- congruence -
- preimage -
- image -
- isometry -
- reflection -
- translation -
- rotation -

Concept: Triangles and Coordinate Proofs

- coordinate proof -