

12/3 Geometry

(1) Have your compass on your desk to be checked.



☺☺☺☺ Today is a GREAT day to think mathematically! Let's get organized first. ☺☺☺☺

TABLE OF CONTENTS: **12/3 HL triangle congruence**

NEW NOTEBOOK PAGE: **12/3 HL triangle congruence - Name**
SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS and HL and know when to use each postulate or theorem.

Assignment Sheet: **12/3 CW: HL triangle congruence Due 12/3**
12/3 HW: HL triangle congruence Due 12/4

DO NOW SHEET: **Name, Date, Period, complete the conditional statement in flowchart format:**
"If a diagram shows parallel lines m and n , transversal t , and alternate interior angles a and b , then _____."

SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

12/3 Announcements

1. You will be earning points every day for having a compass.
2. .

SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

12/3 Geometry

00:05 00

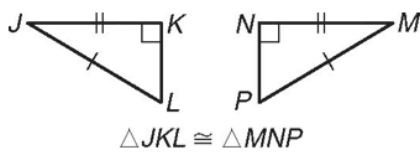
SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

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Notes (Copy into your notebook and draw a box around them)

HL Congruence:



The hypotenuse and leg of 1
right triangle are congruent
to the hypotenuse and leg of
another right triangle

Given

The triangles are congruent

HL \cong theorem

12/3 Geometry

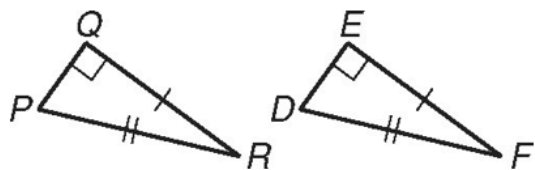


SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

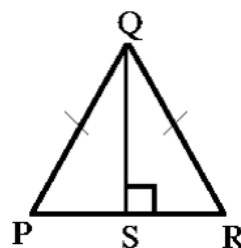
G.G.

Prove that the triangles in each pair are congruent in a flowchart or state why it is not possible to prove they are congruent.

Ex1:



Ex2:



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

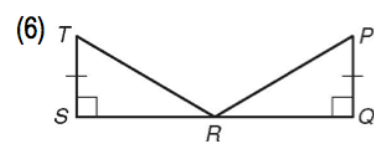
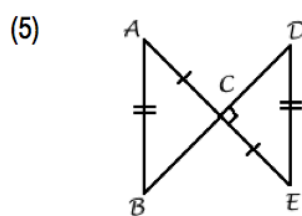
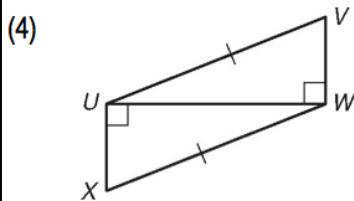
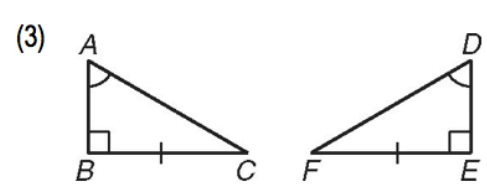
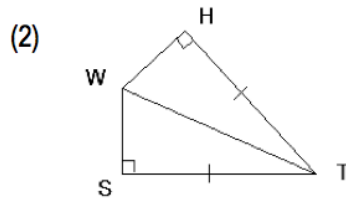
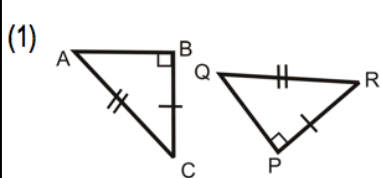
G.G.

FOR THE CLASSWORK YOU MAY NEED TO USE:

Vertical Angles Theorem
Reflexive Property

Definition of Midpoint
Definition of Bisect

CW: In your notebook, write a flowchart proof to show that the triangles in each pair are congruent.



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

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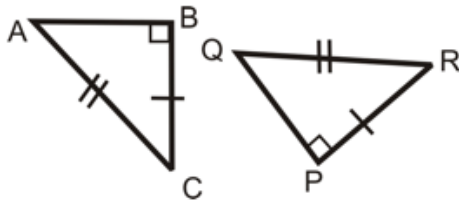
Vertical Angles Theorem

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(1)



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

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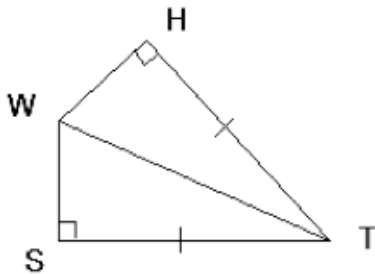
Vertical Angles Theorem

Reflexive Property

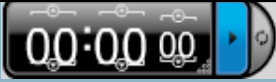
Definition of Midpoint

Definition of Bisect

(2)



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

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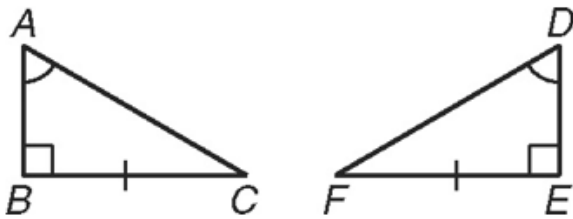
Vertical Angles Theorem

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(3)



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

FOR THE CLASSWORK YOU MAY NEED TO USE:

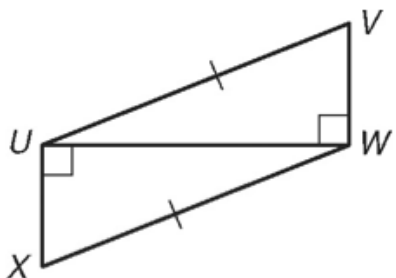
Vertical Angles Theorem

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Definition of Midpoint

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(4)



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

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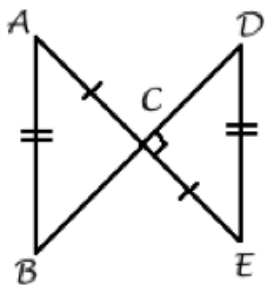
Vertical Angles Theorem

Reflexive Property

Definition of Midpoint

Definition of Bisect

(5)



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

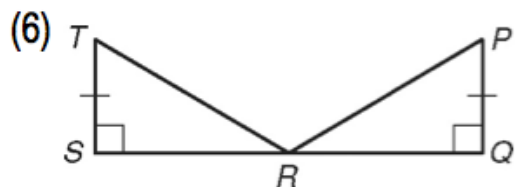
FOR THE CLASSWORK YOU MAY NEED TO USE:

Vertical Angles Theorem

Reflexive Property

Definition of Midpoint

Definition of Bisect



12/3 Geometry



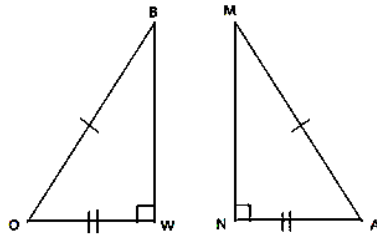
SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

EXIT

BACK OF DO NOW SHEET: Today my level of understanding is 😊 😐 😞 because _____

Write a flowchart proof showing that the triangles are congruent.



12/3 Geometry



SLO: I can prove triangles are congruent by SSS, SAS, ASA, AAS, and HL and know when to use each postulate or theorem.

G.G.

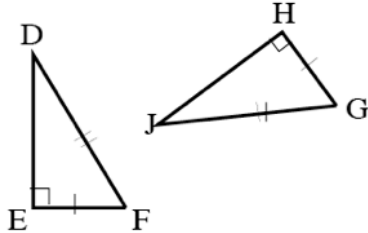
Geometry HW 12/3/12

Name _____ Date _____ Per _____

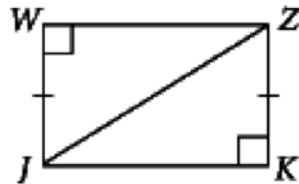
COMPLETE ON A FULL SHEET OF LINED PAPER

Write a flowchart proof showing that the triangles in each pair are congruent or explain why proof is not possible.

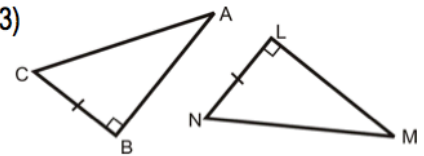
(1)



(2)



(3)

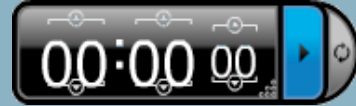


Blank area for writing flowchart proofs.

11/28 Geometry

SLO: I can prove triangles are congruent with the SSS congruence postulate.

G.G.



<http://www.mathopenref.com/congruentsss.html>

11/7 Geometry



Converse

If an angle is a right angle, then it measures 90° .

SLO: I can write the converse, inverse, and contrapositive of a statement and state the truth value of each.

G.G..

11/7 Geometry

Inverse

If two angles are adjacent, then they are a linear pair.

SLO: I can write the converse, inverse, and contrapositive of a statement and state the truth value of each.

G.G..

11/7 Geometry

Contrapositive

If a shape is a triangle, then the sum of its angles is 180° .

SLO: I can write the converse, inverse, and contrapositive of a statement and state the truth value of each.

G.G..

11/7 Geometry

Contrapositive

If two angles are supplementary, then they are a linear pair.

SLO: I can write the converse, inverse, and contrapositive of a statement and state the truth value of each.

G.G..

11/7 Geometry

Inverse

If corresponding angles are not congruent then the lines forming them are not parallel.

SLO: I can write the converse, inverse, and contrapositive of a statement and state the truth value of each.

G.G..

11/7 Geometry

Converse

If a line segment is bisected, then the line segment is divided into two equal line segments.

SLO: I can write the converse, inverse, and contrapositive of a statement and state the truth value of each.

G.G..

10/5 Geometry PRIDE

Names & accomplishments

10/16 Ticket Out the Door

SLO: Justify that lines are parallel by comparing slopes on graphs or from equations.

G.G.63 Determine whether two lines are parallel, perpendicular, or neither, given their equations.

Were you 100% focused and engaged during today's lesson?

YES

NO

%

Rate your understanding of today's objective.

4

completely understand

3

mostly understand

2

understand a little

1

a bit confused

0

completely confused

Take a minute to help me gauge your understanding by answering the following question.
SHOW YOUR WORK!!!

What went well for you today during geometry? Why?

9/17 Quiz

Face desks forward and clear desk except for

Communication of any sort = ZERO

RAISE YOUR HAND silently if you need something

CCSS Standard:

9/17 Test

Face desks forward and clear desk except for

Communication of any sort = ZERO

RAISE YOUR HAND silently if you need something

CCSS Standard:

