11/26 Geometry

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

(2) Follow instructions on today's handout. DO NOT WRITE ON HANDOUT!!!

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

TABLE OF CONTENTS: **11/26 Triangle Angle Relationships**

NEW NOTEBOOK PAGE: **11/26 Triangle Angle Relationships – Name**
SLO: I can prove theorems about triangle angle relationships.

Assignment Sheet: **11/26 CW: Triangle Angle Relationships Due 11/26**
11/26 HW: Triangle Angle Relationships Due 11/27

DO NOW SHEET: **Name, Date, Period, and write the converse, inverse, & contrapositive of the statement: "If a triangle has two congruent sides, then the triangle is isosceles."**

SLO: I can prove theorems about triangle angle relationships.

G.G.

11/26 Announcements

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

SLO: I can prove theorems about triangle angle relationships.
G.G.

11/26 Geometry

SLO: I can prove theorems about triangle angle relationships.

G.G.

11/26 HW Check & Questions from 11/19

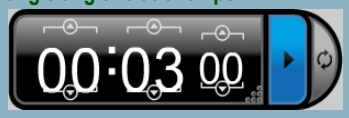
SLO: I can prove theorems about triangle angle relationships.

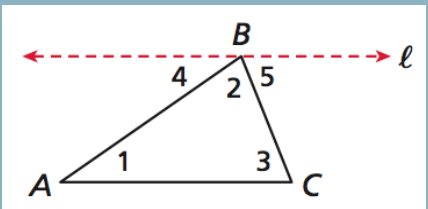
G.G.

11/26 Geometry

SLO: I can prove theorems about triangle angle relationships.

G.G.





If ABC is a triangle then $m\angle 1 + m\angle 2 + m\angle 3 = 180°$

$m\angle 4 + m\angle 2 + m\angle 5 = 180°$

Straight angle and angle addition

Draw $\ell \parallel \overline{AC}$ through B.

Parallel Post.

$\angle 1 \cong \angle 4$

Alt. Int. angles Thrm.

$\angle 3 \cong \angle 5$

Alt. Int. angles Thrm.

$m\angle 1 = m\angle 4$

def. of congruent

$m\angle 3 = m\angle 5$

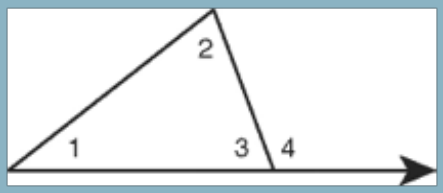
def. of congruent

$m\angle 1 + m\angle 2 + m\angle 3 = 180°$

substitution

11/26 Geometry

SLO: I can prove theorems about triangle angle relationships.
G.G.



If angle 4 is an exterior angle of a triangle, then the sum of the of remote interior angles 1 and 2 is equal to the measure of angle 4.

m1 + m2 + m3 = 180
Triangle sum thrm.

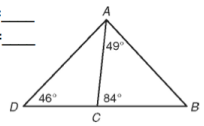
m3 + m4 = 180
Linear Pair supplementary

m1 + m2 = m4
substitution

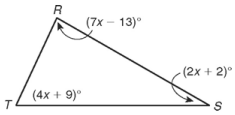
11/20 Geometry

CW: In your notebook, find each measure below.

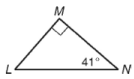
1. m∠*ABC*=____
2. m∠*CAD*=____



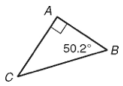
3. x =____
4. m∠*R* =____
5. m∠*W* =____
6. m∠*T* =____



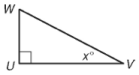
5. m∠L



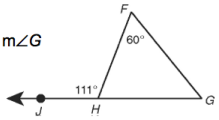
6. m∠C



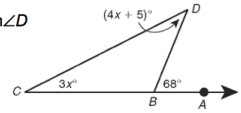
7. m∠W



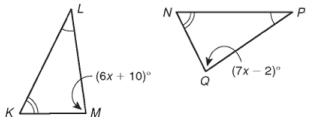
8. m∠*G*



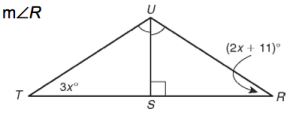
9. m∠*D*



10. m∠*M* and m∠*Q*



11. m∠*T* and m∠*R*

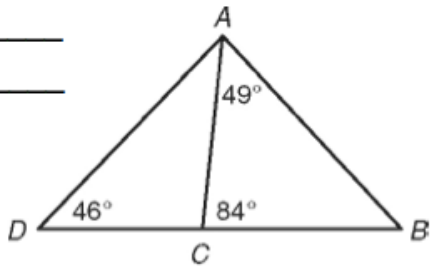


SLO: I can solve problems by applying theorems about triangle angle relationships.

G.G.

11/20 Geometry

1. m∠*ABC*=____
2. m∠*CAD*=____

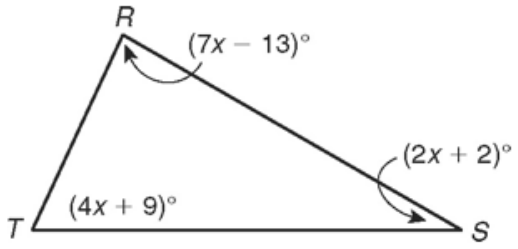


SLO: I can solve problems by applying theorems about triangle angle relationships.

G.G.

11/20 Geometry

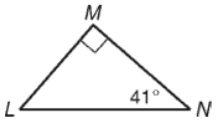
3. x = ____
4. m∠R = ____
5. m∠W = ____
6. m∠T = ____

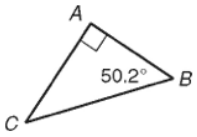


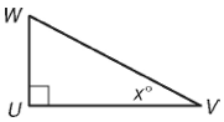
SLO: I can solve problems by applying theorems about triangle angle relationships.

G.G.

11/20 Geometry

5. m∠L 

6. m∠C 

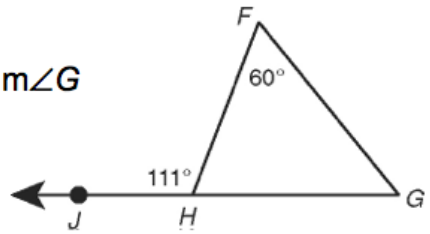
7. m∠W 

SLO: I can solve problems by applying theorems about triangle angle relationships.

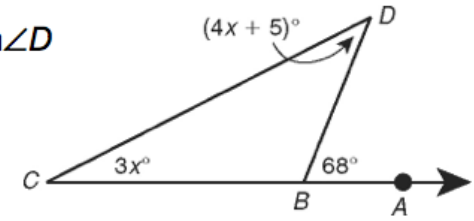
G.G.

11/20 Geometry

8. m∠G



9. m∠D

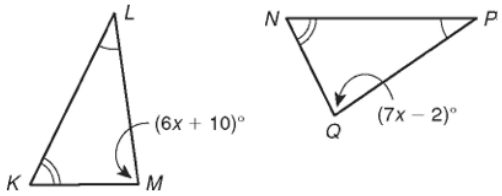


SLO: I can solve problems by applying theorems about triangle angle relationships.

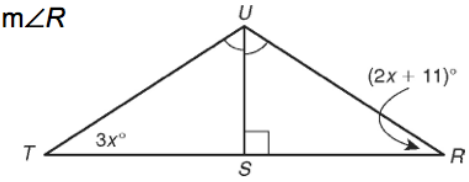
G.G.

11/20 Geometry

10. m∠*M* and m∠*Q*



11. m∠*T* and m∠*R*



SLO: I can solve problems by applying theorems about triangle angle relationships.

G.G.

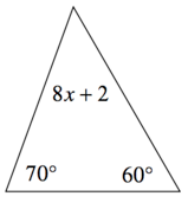
11/20 Geometry

HOMEWORK: Problems under "Friday 11/16" on the homework sheet.

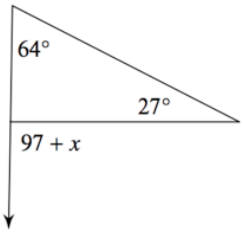
EXIT BACK OF DO NOW SHEET: Today my level of understanding is ☺😐☹ because _____

Identify the theorem you can use to find x and write an equation. Solving the equation for x is extra credit.

(1)



(2)



SLO: I can solve problems by applying theorems about triangle angle relationships.

G.G.

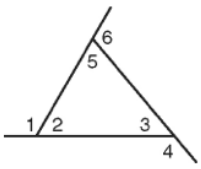
11/20 Geometry

15

Friday 11/16:

1–3 name all the angles that fit the definition of each vocabulary word. 4-7 write the correct term for each blank

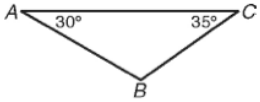
1. exterior angle
2. remote interior angles to ∠6
3. interior angle



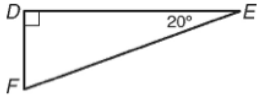
4. The measure of each angle of an_____ triangle is 60°.
5. The sum of the angle measures of a triangle is _____.
6. The acute angles of a _____ triangle are complementary.
7. The measure of an _____ of a triangle is equal to the sum of the measures of its remote interior angles.

8-13 Find the measure of each angle.

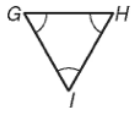
8. m∠B



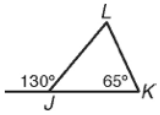
9. m∠F



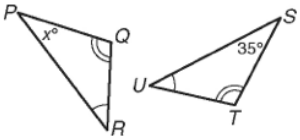
10. m∠G



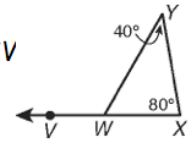
11. m∠L



12. m∠P



13. m∠V



SLO: I can solve problems by applying theorems about triangle angle relationships.

G.G.

11/19 Geometry

SLO: I can classify triangles based on their properties.

G.G.

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	3	2	1	0
completely understand	mostly understand	understand a little	a bit confused	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: