Geometry - Unit 4

Day	Topic, Standard	Std.	Teaching	Homework
27	Quadratic Formula and Factoring	Alg	SV 9, 10; Skill Builders #8 (p.SB26 #1-45 odd)	Skill Builders #10 (p.SB31 #1-20)
28	Quadratic Functions	Alg	Skill Builders #9 (p.SB29 #1-24)	SV 10, 14, 16, 17, 45, 75
29C	Transformations	22	Additional Practice Day 29	CG 8,14, 15, 16,18, 29
30	Triangle Congruence Postulates	5	Add'l Practice Day 30	CG 28, 37,42, 44, 47
31	Triangle Congruence Theorems	5	Add'l Practice Day 31	Skill Builders #11 (p.SB 33-34, #1-15) CG 56,58,66,80
32C	Interior Angles of Polygons *Green Book*	12, 13	Add'l Practice Day 32	US 1 read, 7, 15, 17, 18, 19, 33
33	Exterior Angles of Polygons *Green Book*	12, 13	Add'l Practice Day 33	US 71, 74, 76, 87, 88, 96
34 MB	Quadrilateral Properties *Grn.Bk.*	7	Add'l Practice Day 34	US 83, 93, 94, 117 a, b
35C	Buffer		Benchmark Quiz	Correct all incorrect answers on the quiz – show all work and include diagrams!
36	Miscellaneous Theorems: 1) Triangle Inequality: Sum of two shortest sides > longest side 2) Longest side is opposite the largest angle (not in CPM book) 3) Midsegment Theorem	6	Additional Practice Day 36	CG 78, 86, 87; TK 21, 58, 92, 96
37	Review		Practice Test	Practice Test Completion
38	Test Unit 4			None
39	Constructions		Constructions	None

Additional Practice

Day 29

1. Given ΔABC with points A(2, 3), B(6, 1) and C(7, 4). The triangle is

translated to form ΔA′B′C′ where A′ is the

point (-6, 1). Find the points B′ and C′ .

2. Given ΔABC with points A(1, -1), B(1, -4) and C(6, -2). The triangle is reflected across the x-axis to form ΔA′B′C′ .

Find the point

s A′, B′ and C′.

3. Given ΔABC with points A(3, 0), B(6, 0) and C(4, -1). The triangle is rotated 90° counterclockwise around the origin to form ΔA′B′C′. Find the points A′, B′ and C′.

4. Given

ΔABC with points A(-2, 1), B(-5, -2) and C(-4, -4). Plot the points to form the triangle and translate the triangle 8 units in the x-direction and -3 units in the y-directions. Plot the points A′, B′ and C′ to form ΔA′B′C′.

5. Given ΔABC with points A(-2, 3), B(-1, -1) and C(-4, -5). Plot the points to form the triangle and reflect the triangle over the y-axis. Plot the points A′, B′ and C′ to form $\Delta A′B′C′$.

6. Given ΔABC with point

s A(0, 3), B(1, 1) and C(2, 4). Plot the points to form the triangle and rotate the triangle

180° counterclockwise

around the origin. Plot the points A′, B′ and C′ to form $\Delta A'B'C'$.

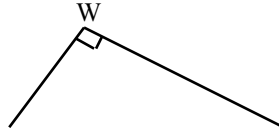## Day 30

If the triangles are cong

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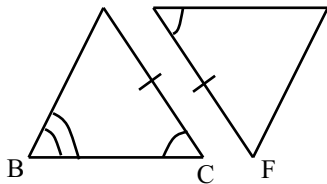gles
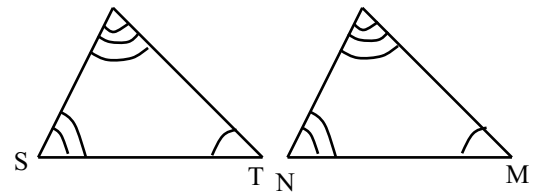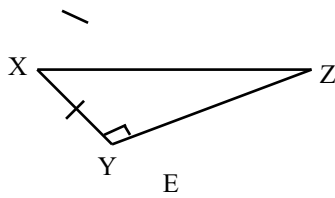are
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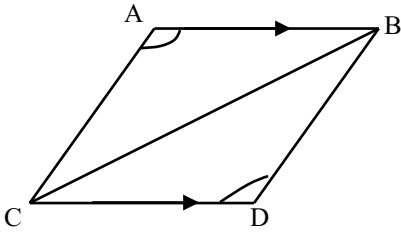1.   A   D

E

W

R   O

2.

3.

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B   C   F

X   Z
Y

S   T   N   M

4.

5.

6.

A   B

C   D

F   G   H

Y   W

X   Z   V

7.   A   B   N

F
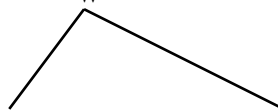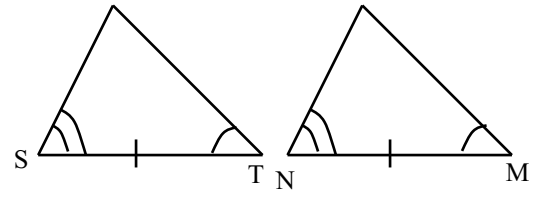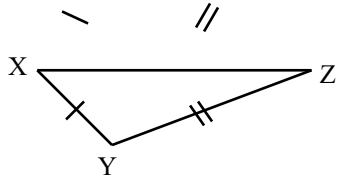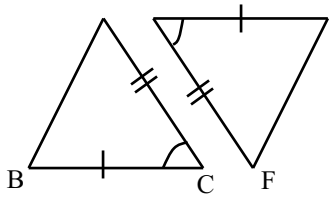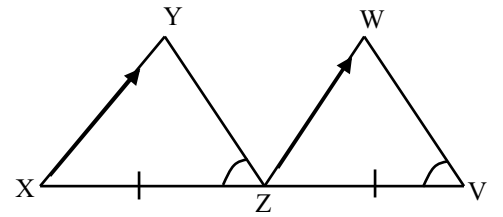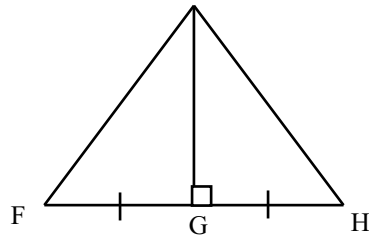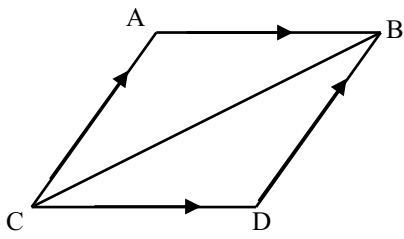
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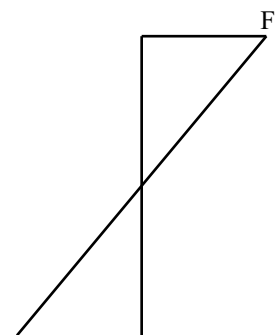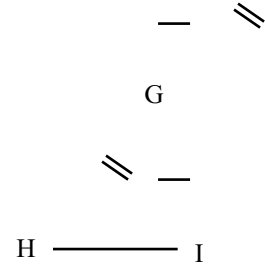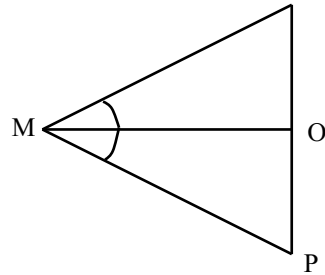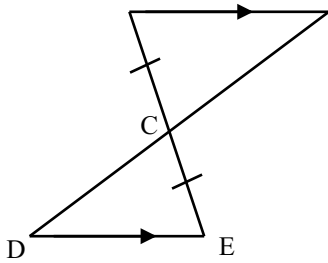
If the triangles are congruent, state why they are congruent (SSS, SAS, ASA, AAS, or, HL) and give the correct congruen

ce state ment . If you cann ot deter mine that the trian gles are cong ruent , state "not cong ruent "

1.

A   D   E   W   R   O

2.

3.

B   C   F   X   Z   S   T N   M
                              Y
                              E

4.

5.

6.

A   B

C   D

F   G   H

Y   W

X   Z   V

7.   A   B   N

8.

9.

C

D   E

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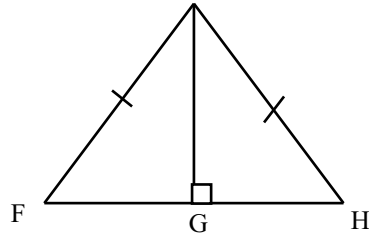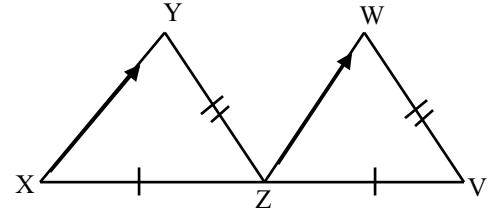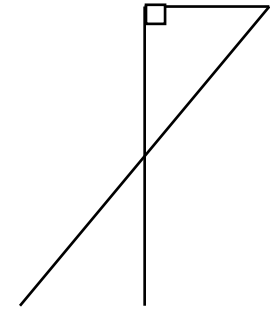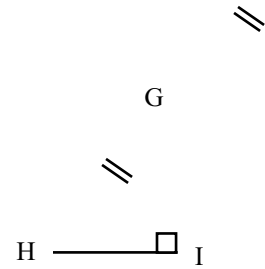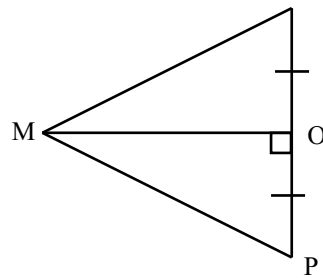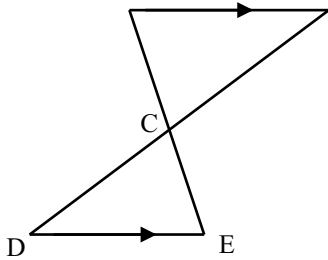
1) The sum of the measures of the interior angles of a polygon is 2340
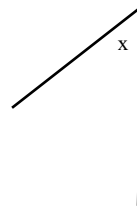
. How many sides does it have?

2) Find the sum of the measures of the interior angles of a 20-gon.

3) Find the measure on one interior angle of a regular nonagon.

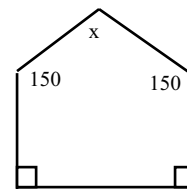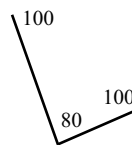4) The measure of one interior angles of a polygon is 140. How
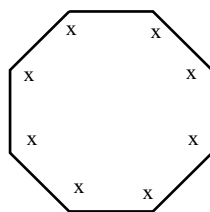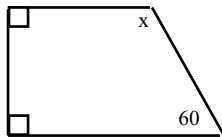
many sides does the polygon have?

5) Find x

6)

7)

8)

Day 33

1) A hexagon has exterior angles of 80, 50, 70, 100, 40, and x. Find x.

2) A

regular polygon has one exterior angle of 40. Find the number of sides.

3) Find the sum of the exterior angles of a heptagon.

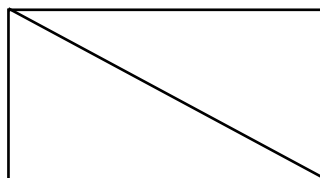4) A regular polygon has one interior angle of 60. Find the number of sides.

5) Find x
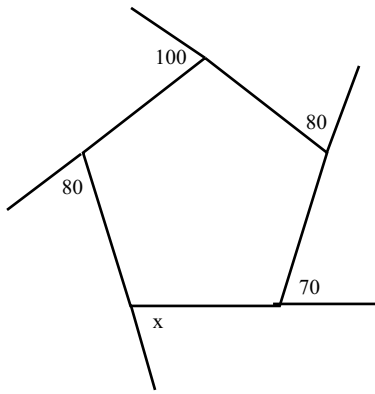
1. Is a square a rectangle?

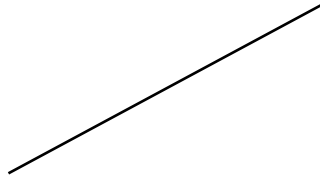2. Find x in the rectangle

3. Find BC in the rhombus where
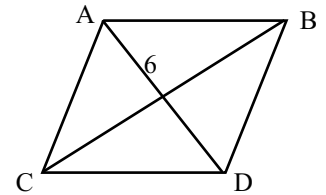
Is a parallelogram a rhombus?

AC = 10 and AE = 6

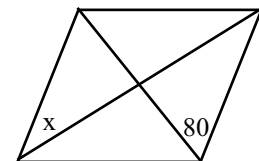Is a quadrilateral a trapezoid?
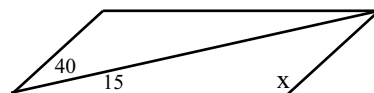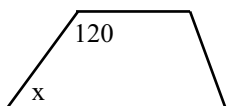
Is a rectangle a trapezoid?

A ————— B
6
C ————— D

10   E

x

70

4. Find x in the trapezoid

5. Find x in the parallelogram

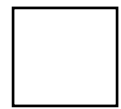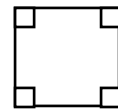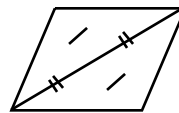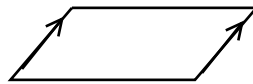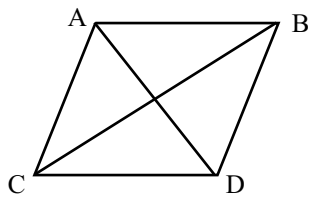6. Find x in the rhombus

120

x

40
15   x

x
80

7. Find the perimeter of the rhombus

8. Name each quadrilateral based on the properties shown

where CB = 30 and AD = 16

A   B

C   D

Day 36

Triangle Inequality (1)

Can each of

the following sets of three sides form a triangle? (yes or no)

1. 3, 7, 12

2. 2, 2, 57

3. 14, 16, 18

4. 5, 9, 14

Find the maximum and minimum values for the third side of a trian

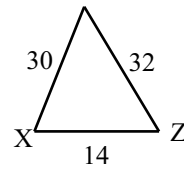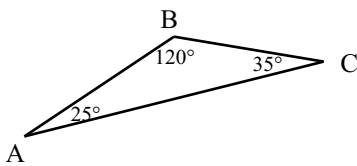gle with two sides given

5. 3 and 8

6. 40 and 60

7. 34 and 53

8. 5 and 29

Triangle Inequality (2)

1. Find the longest side in the given triangle

Y

2. Find the largest angle in the given triangle

B

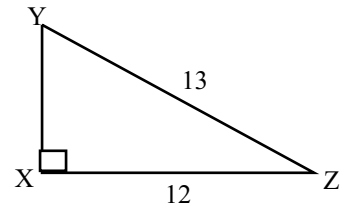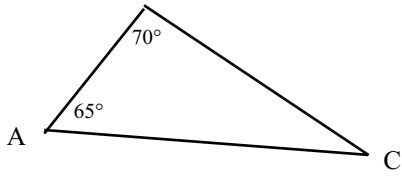120° 35° C

25°

A

30 /\ 32

X ‾‾‾‾ Z
14

3. Find the shortest side in the given triangle

B

4. Find the smallest angle in the

given triangle

70°

65°

A

C

Y

13

X

12

Z

Midsegment Theorem (3)

Find x and y in each figure, given points M and N are midpoints:

1.

2.

3.

4.

M y N
14
35°
x

M 80° N
y
x
40°
30

M 75° 48
2x + 6
25° y
N

M 4x - 2
20° 19
130° y
N