From the U4 test...

Find the x-intercept: y = 7/4x + 21

$$y = \frac{7}{4}x + 21$$

x-int → y = 0

$$0 = \frac{7}{4}x + 21$$

$-21 \qquad -21$

$$4(-21) = \left(\frac{7}{4}x\right)4$$

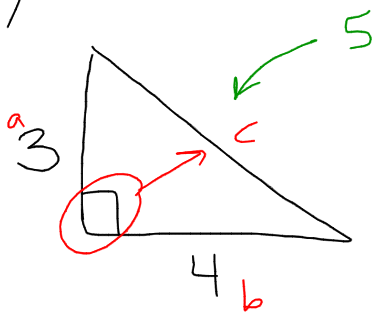
$$\frac{-84}{7} = \frac{7x}{7}$$

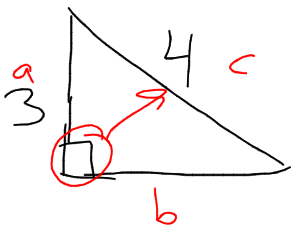
$$-12 = x$$

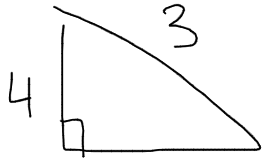
May 6-11:05 AM

5.6 Conj. HW

d)







$3^2+4^2=c^2$

$9+16=c^2$

$\sqrt{25}=\sqrt{c^2}$

$5=c$

✓

$3^2+b^2=4^2$

$9+b^2=16$

$-9 \quad -9$

$\sqrt{b^2}=\sqrt{7}$

$b \doteq 2.64$

X

Nov 29-8:05 AM

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Homework Questions?

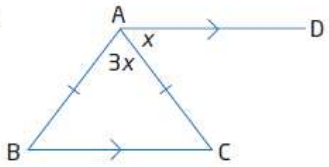
20. Math Contest The measure of $\angle BCA$ is

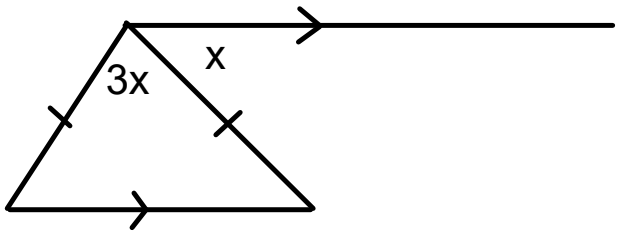
A 30°

B 36°

C 45°

D 60°





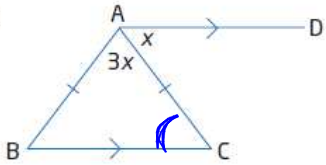
Apr 28-9:25 AM

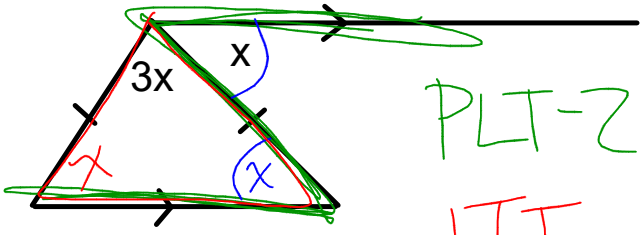
Homework Questions?

p393

20. Math Contest The measure of $\angle BCA$ is

A 30°
B 36°
C 45°
D 60°





PLT-2

ITT

ASTT :

$3x + x + x = 180$

$5x = 180$

$x = 36°$

$\therefore \angle BCA = 36°$

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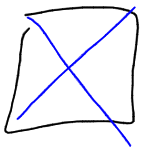
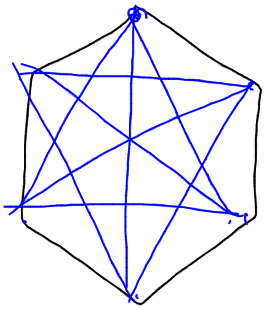
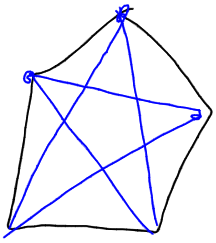
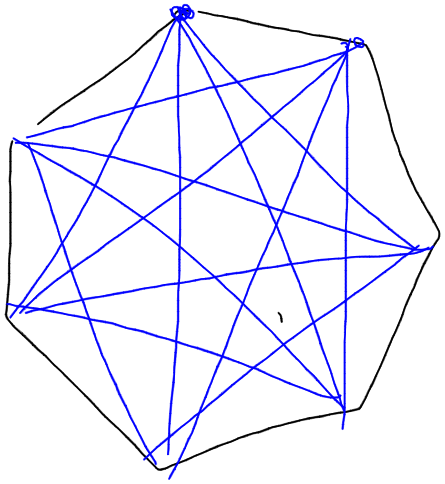
21)









sides	diagonals	
3	0	
4	2	>2
5	5	>3
6	9	>4
7	14	>5
8	20	>6
9	27	>7
10		
11		
12		

May 6-9:38 AM

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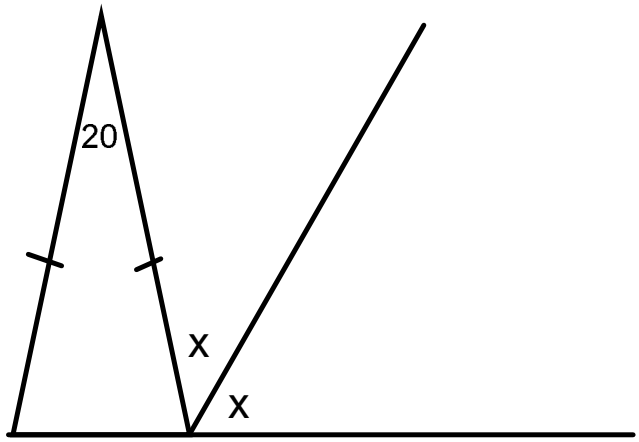
14)

Homework Questions?



Apr 28-9:25 AM

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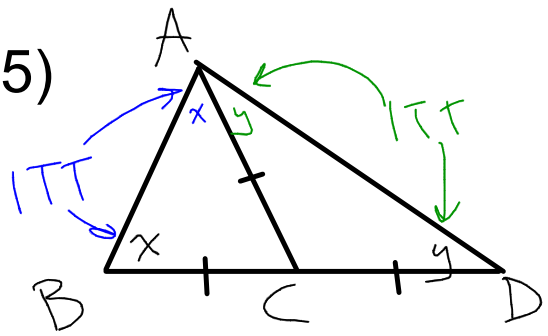
15)



△ABD

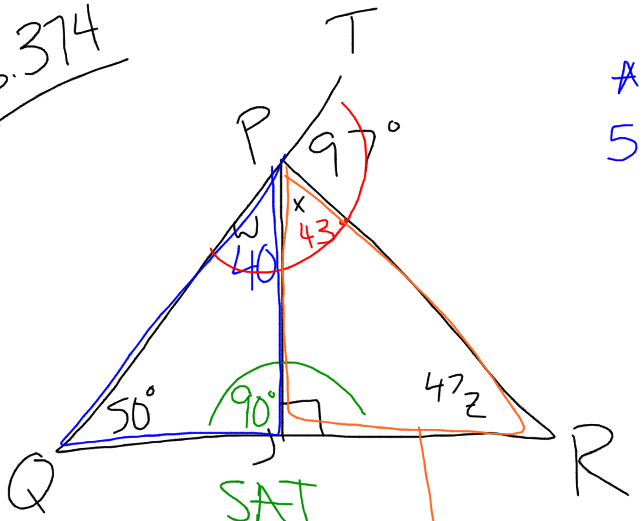
△STT

$x+y+x+y=180$

$\frac{2x}{2}+\frac{2y}{2}=\frac{180}{2}$

$x+y=90$

p.374



△STT

$50+90+w=180$

$w=40$

SAT

$y=90$

SAT

$97+x+40=180$

$x=43°$

△STT

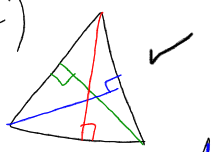
$43+90+z=180$

$z=47°$

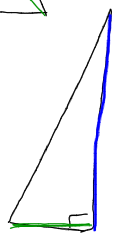
May 4-9:43 AM

conjectures

f)



Altitude = height



k)

1, obtuse exterior

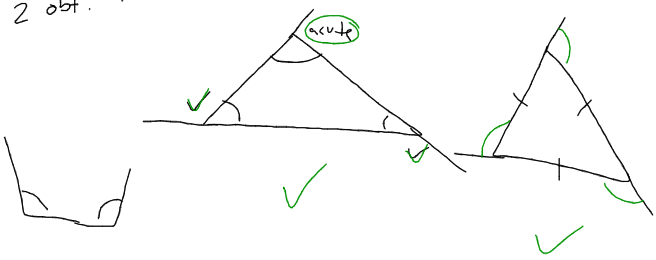
2,

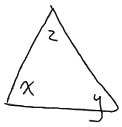
3

1 acute int.
2 obt. int ∠.

2 acute int.

3 acute int.





Can you have
2 obtuse int ∠s?

$x > 90$

$y > 90$

$z = ?$

$x + y + z = 180°$

$91 + 91 + z = 180$

$182 + z = 180$

Nov 29-8:17 AM

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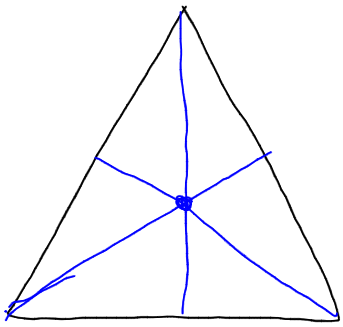
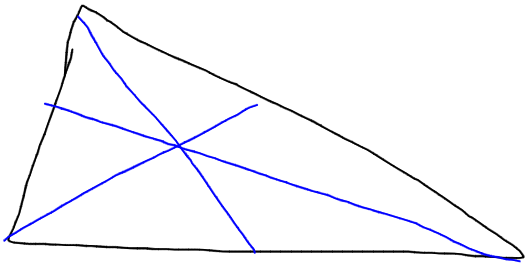
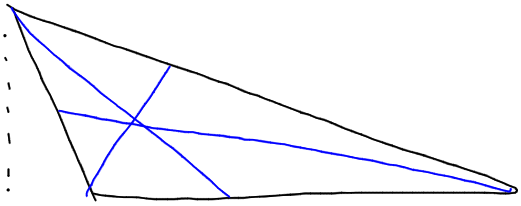
14)





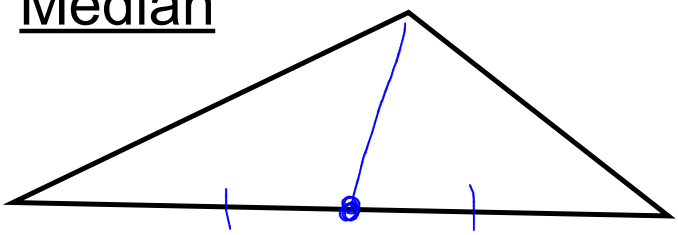


May 6-9:43 AM

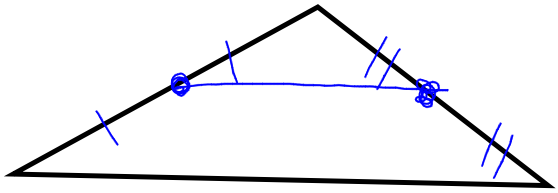
as a class

Recall: midsegment & median

Median



Midsegment

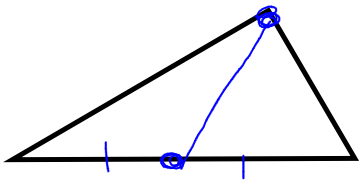


Apr 28-9:25 AM

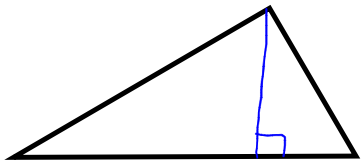
as a class

For the following triangles, draw the:

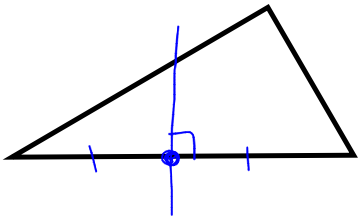
median



altitude

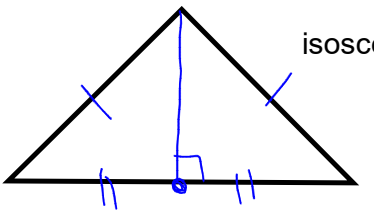


perpendicular bisector

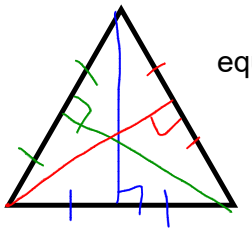


In what triangle are these all the same line?

isosceles



equilateral

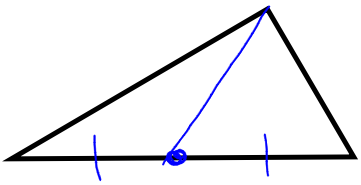


May 4-1:17 PM

as a class

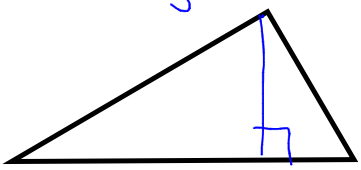
For the following triangles, draw the:

median

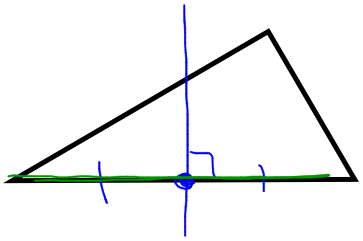


altitude

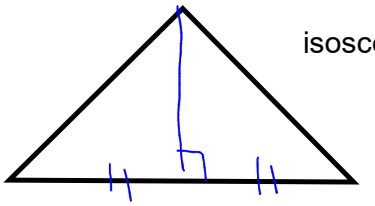
height



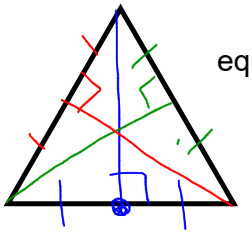
perpendicular bisector



In what triangle are these all the same line?



isosceles

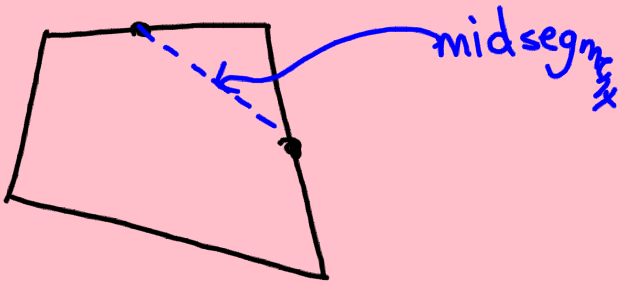


equilateral

From one vertex only

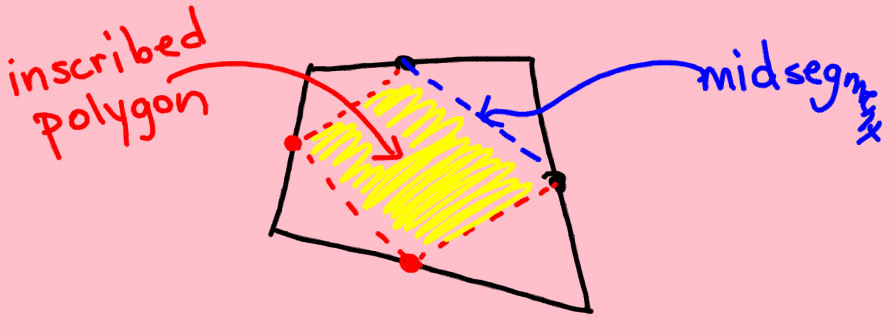
on your pink sheet

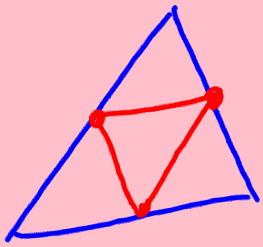
Add this definition & diagram to your notes from yesterday



Inscribed Polygon

- a polygon that is formed by joining adjacent midsegments





I'll hand out protractors.

handout 5.5 (back of 5.3)

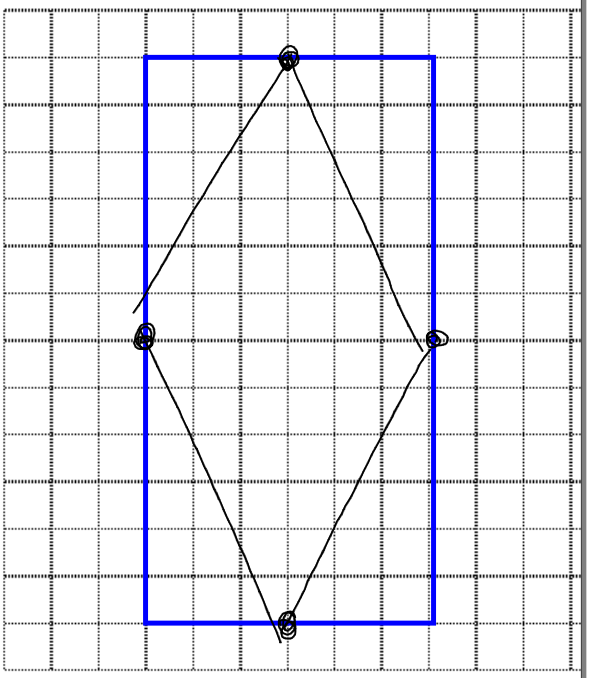
Complete the exploration with your neighbour

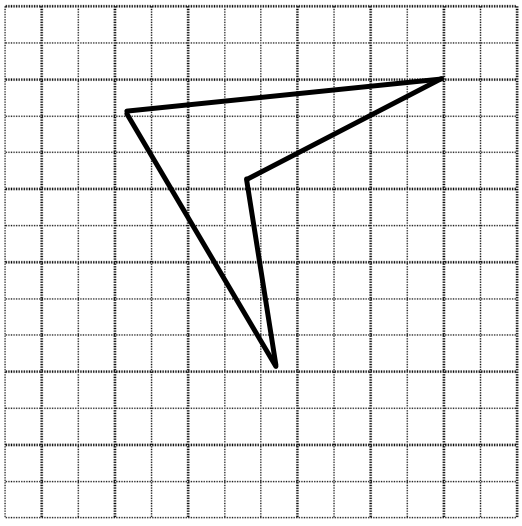
For each of the following polygons draw the shape described that is distinctly that shape (ie: a parallelogram that is not close to a rhombus, rectangle or square), then follow these 4 steps:

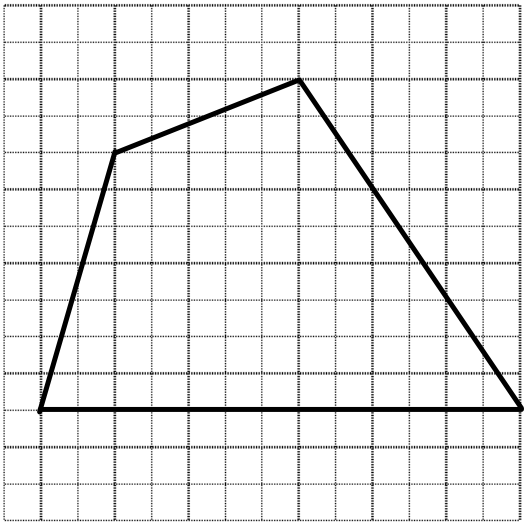
1. Locate the midpoint of each side of the polygon.
2. Join the adjacent midpoints (midsegments) to create an inscribed polygon.
3. Measure side lengths and angles of the inscribe polygon. Add labels to show equal side lengths and 90 degree angles.
4. Classify the inscribed polygon as specifically as you can.

Rectangle

Draw a rectangle that is not a square.







Apr 28-9:20 AM

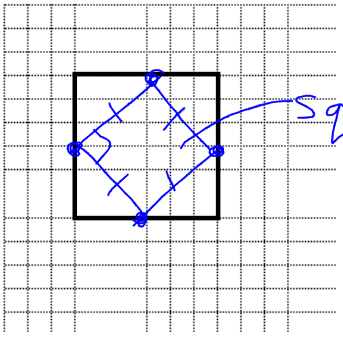
handout 5.5 (back of 5.3)

Investigation: Midsegments of Polygons

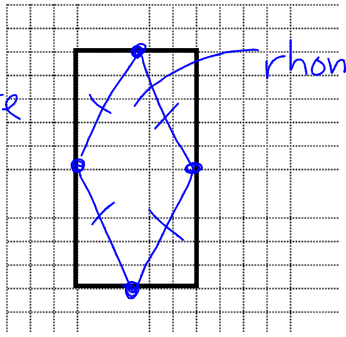
For each of the following polygons you will draw the shape described, then follow these 3 steps:

1. Locate the midpoint of each side of the polygon.
2. Join the adjacent midpoints to create an inscribed polygon.
3. Classify the inscribed polygon as specifically as you can.

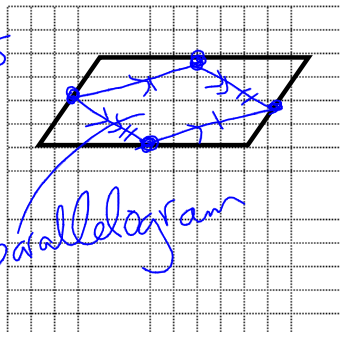
Square
Draw a square.



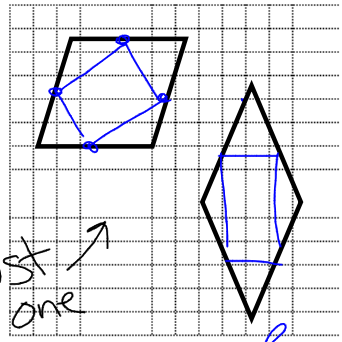
Rectangle
Draw a rectangle that is not a square.



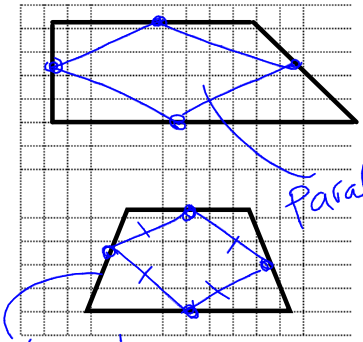
Parallelogram
Draw a parallelogram that is not a square, rhombus or rectangle.



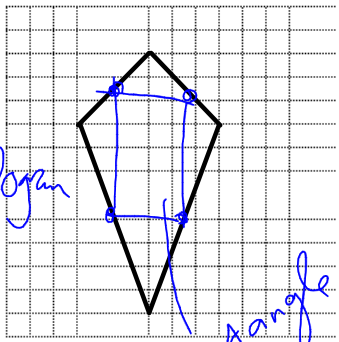
Rhombus
Draw a rhombus that is not a square.



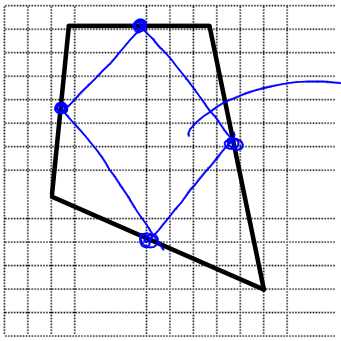
Trapezoid
Draw a trapezoid. BOTH



Kite
Draw a kite.



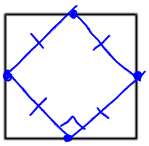
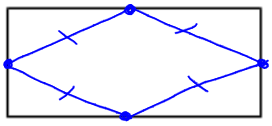
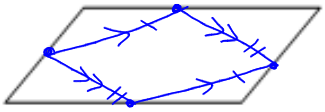
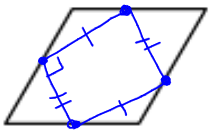
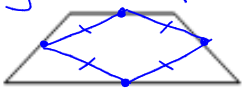
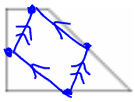
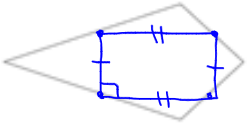
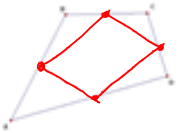
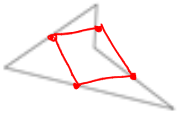
Quadrilateral With No Special Properties
Draw a quadrilateral that cannot be classified as a square, rectangle, rhombus, parallelogram, trapezoid or kite.



May 16-12:10 PM

handout 5.5 (back of 5.3)

Complete the table as a class:

Original Polygon	Inscribed Polygon Formed by Midsegments (use the most specific classification). Include a sketch.
Square	 square
Rectangle	 rhombus
Parallelogram	 parallelogram
Rhombus	 rectangle
Trapezoid	regular trapezoid  rhombus; trapezoid  parallelogram
Kite	 rectangle
Quadrilateral	  parallelogram

*Joining adjacent midpoints of any quadrilateral forms an inscribed polygon that is at least a parallelogram *

Homework:

Page 405 # 6, 7b, 8, 10, 16*

& finish summary card & this handout

Apr 28-9:45 AM

Unit 5 Pink Sheet - Checklist

1. Angle Theorems — Attach 5.1
2. Angles in Polygons
   - Total Interior Angles
   - Exterior Angle
   - Number of sides

(Monday's 5.2)
2 rules
(n-2)180 Exteriors: 360
+3 examples

1. Definitions/vocabulary ✓ printed on pink
2. Diagonal properties – Attach 5.3
3. Triangle Side-Splitting Theorem
4. Median in a Triangle property

Wed. straight on pink

5. Inscribed Polygon properties — Attach 5.5
6. Conjectures
7. what they are
8. How to prove true
   - True Example
1. How to prove false
   - False example

Nov 27-12:29 PM

HW: p405 #6, 7b, 8, 10, 16*

Go back and try e) and i) from conjectures HW

Complete Summary Card (Pink sheet)

May 6-10:53 AM

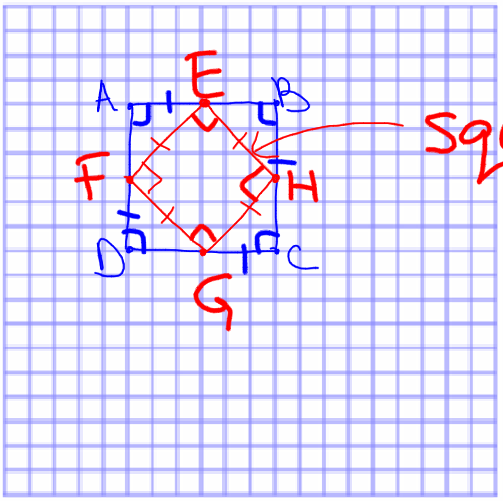
Extra details...

May 5-10:43 AM

~~Part B:~~ The Square

1. Draw a square and label its vertices.
2. Locate and label the midpoint of each side of the square.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.

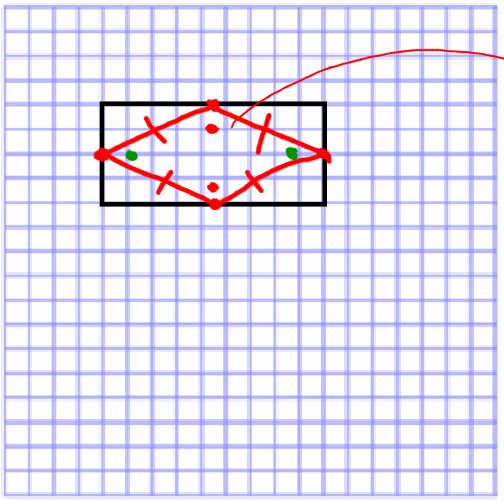
↑most specific



Square

~~Part C:~~ The Rectangle

1. Draw a rectangle that is not a square and label its vertices.
2. Locate and label the midpoint of each side of the rectangle.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.

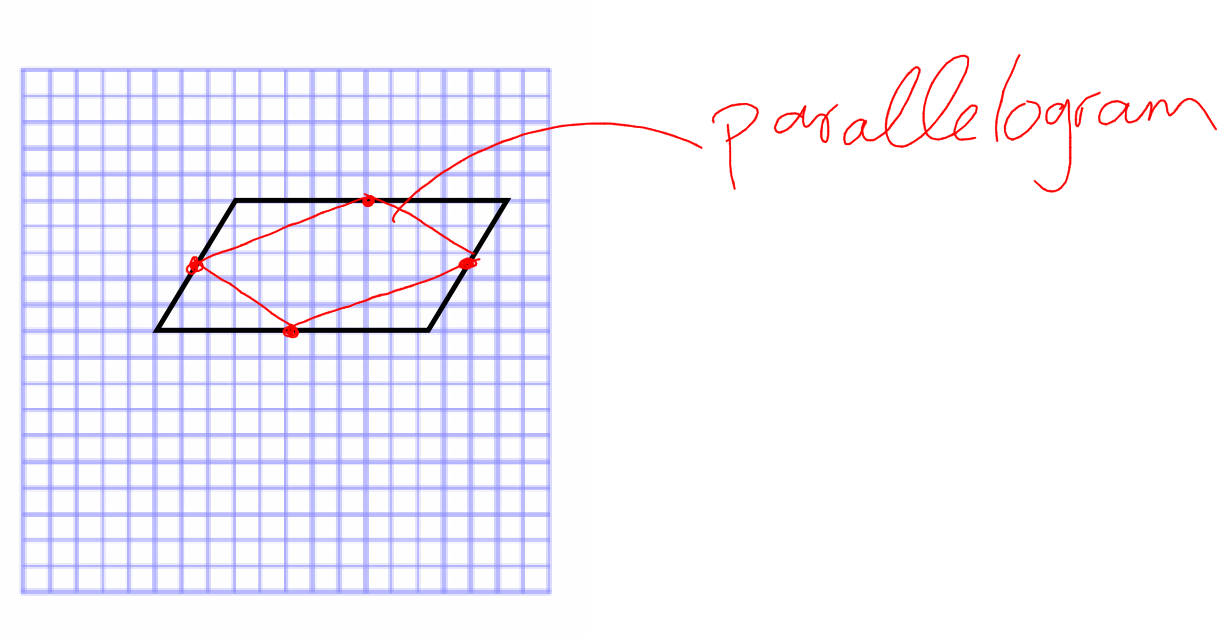


rhombus

Dec 17-1:06 PM

~~Part B~~: The Parallelogram.

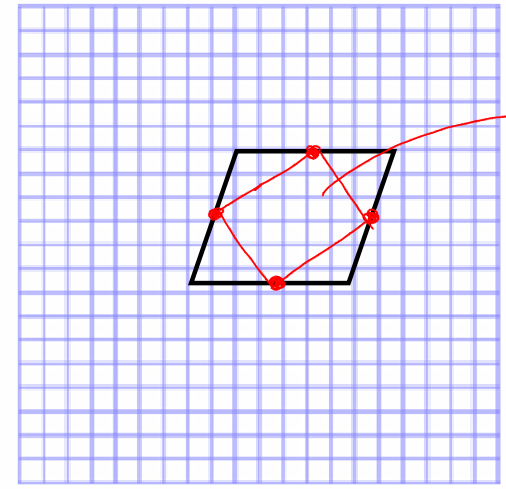
1. Draw a parallelogram that is not a square or rectangle and label its vertices.
2. Locate and label the midpoint of each side of the parallelogram.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.



Dec 17-1:05 PM

~~Part E~~: The Rhombus

1. Draw a rhombus that is not a square and label its vertices.
2. Locate and label the midpoint of each side of the rhombus.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.

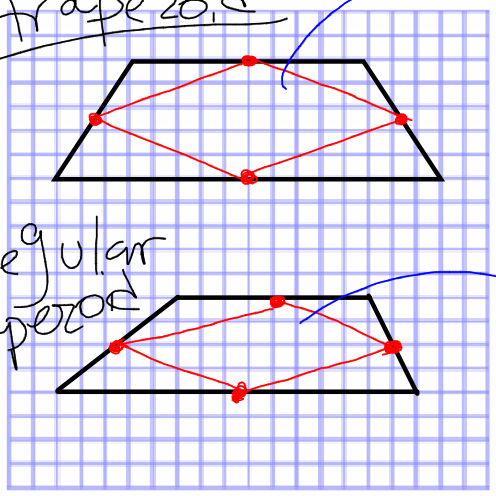


rectangle

~~Part F~~: The Trapezoid

1. Draw a trapezoid and label its vertices.
2. Locate and label the midpoint of each side of the trapezoid.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.

isosceles trapezoid



rhombus IF the two non parallel sides are equal

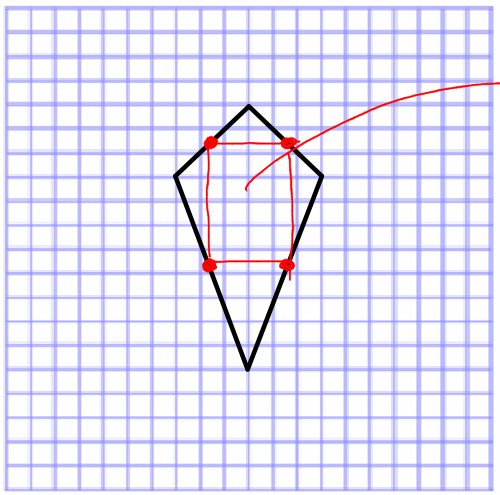
irregular trapezoid

parallelogram IF the non parallel sides are different lengths

Dec 17-1:05 PM

~~Part C~~ The Kite

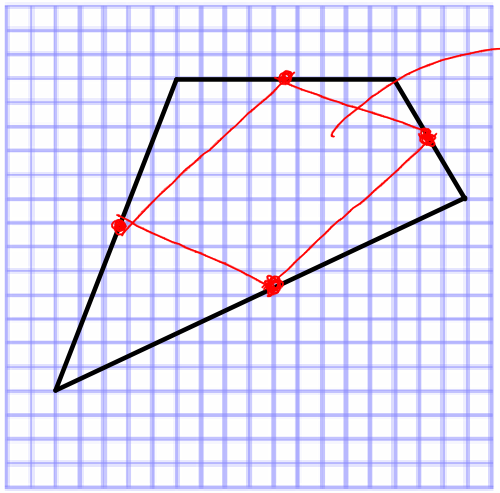
1. Draw a kite and label its vertices.
2. Locate and label the midpoint of each side of the kite.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.



rectangle

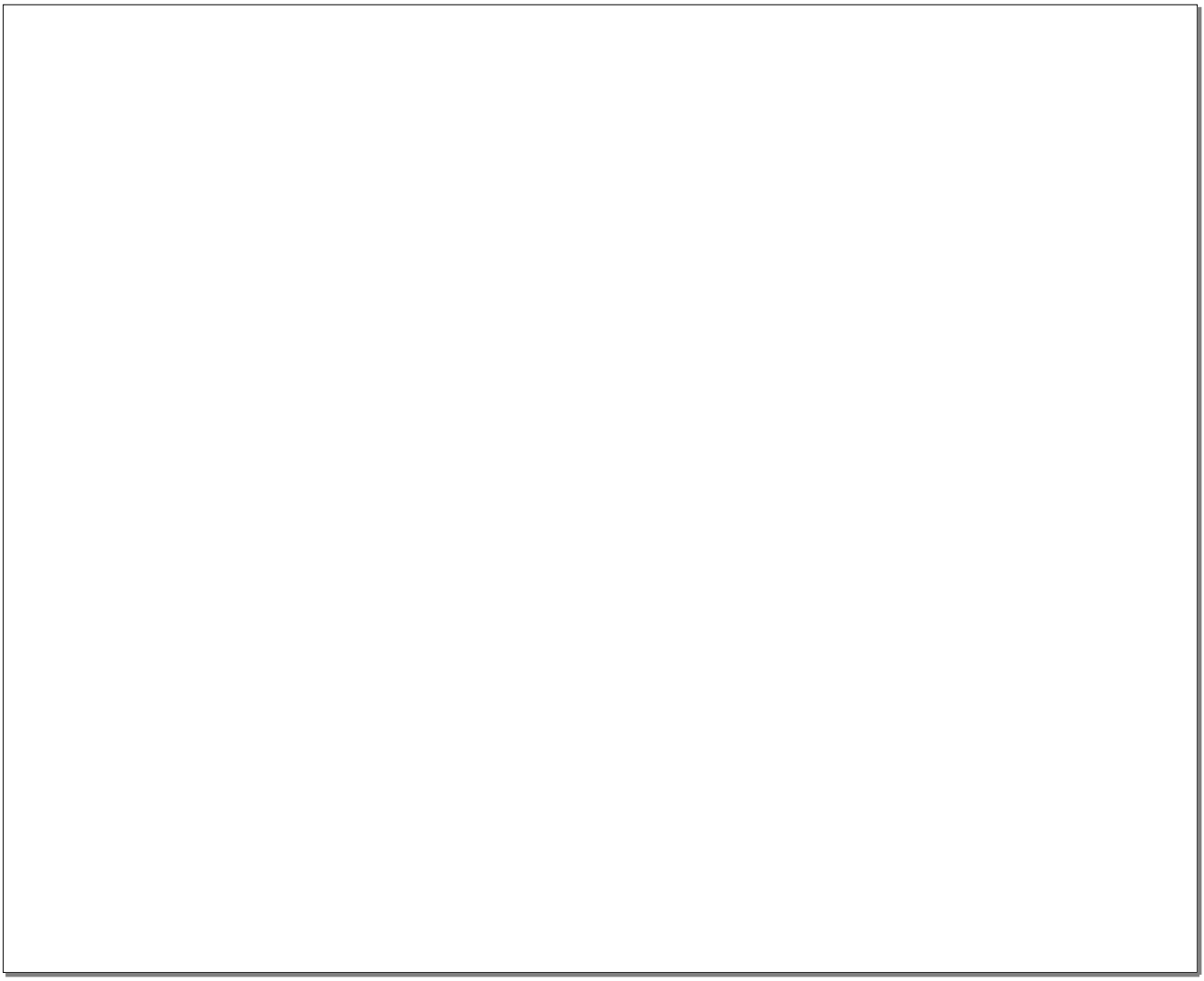
~~Part D~~ A Quadrilateral With No Special Properties.

1. Draw a quadrilateral that cannot be classified as a square, rectangle, rhombus, parallelogram, trapezoid or kite.
2. Locate and label the midpoint of each side of the kite.
3. Join the adjacent midpoints to create an inscribed polygon.
4. Classify the inscribed polygon.



parallelogram

Dec 17-1:05 PM



Apr 27-2:26 PM