

Name _____

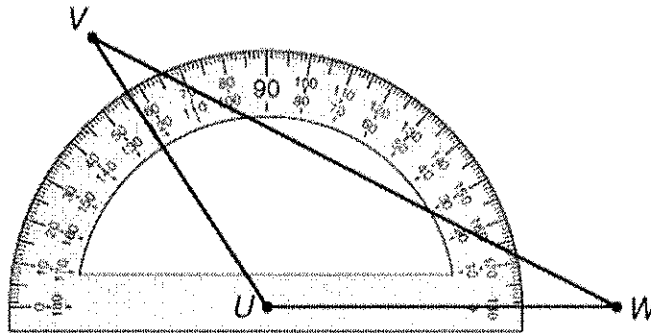
Date _____

Pre-Algebra

Unit 4 Quest - Geometry (70 points)

Part 1: Angles

1) Triangle VUW is shown below.



What is the measure of $\angle VUW$ to the nearest degree? (2 points)

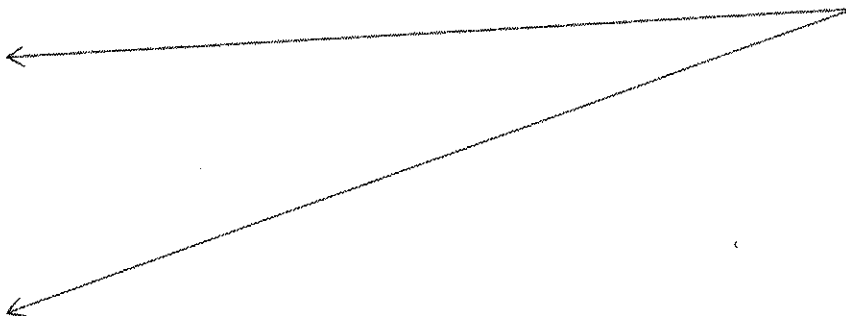
F 57°

G 63°

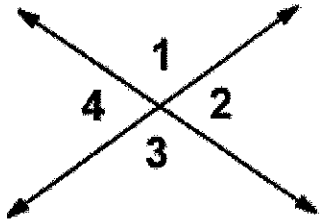
H 123°

J 137°

2) Find the measure of the angle below using a protractor to measure. (2 points)



3)



Angles 1 and 3 are an example of a pair of angles called _____.

Are these

angles \cong ? (yes or no) _____ (4pts.)

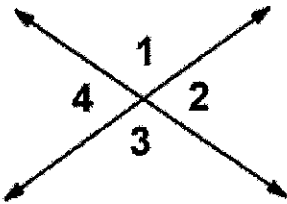
If $\angle 1$ is 112° , what is the measure of :

$\angle 2$ _____ (2 points)

$\angle 3$ _____ (2 points)

$\angle 4$ _____ (2 points)

4)



Angles 2 and 3 will equal _____ degrees because they are _____ angles. (4 pts)

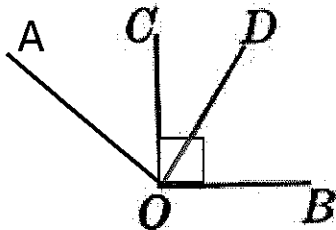
If $\angle 4$ is 66° , what is the measure of :

$\angle 1$ _____ (2 points)

$\angle 2$ _____ (2 points)

$\angle 3$ _____ (2 points)

5)



Adjacent angles COD and DOB are called _____ angles.

Give another name for this acute angle $\angle COD$:

Give another name for this acute angle $\angle DOB$:

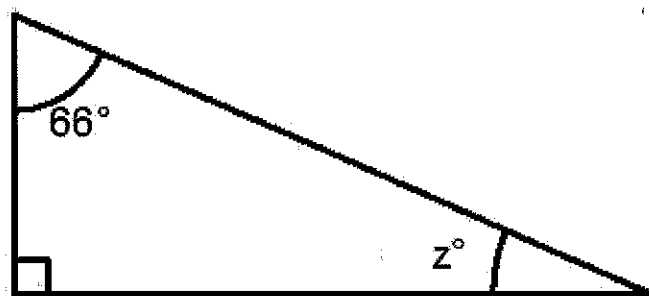
(6 points)

Part 2: Circles and Polygons

Identifying and Classifying Triangles

- ▶ Name and classify the three triangles in the drawing below by its sides and angles (2 pts.)
- ▶ Tell how many degrees the missing angle (x) must be in each triangle (2 pts.)

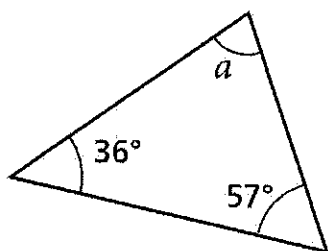
9)



Name: _____

$z =$ _____

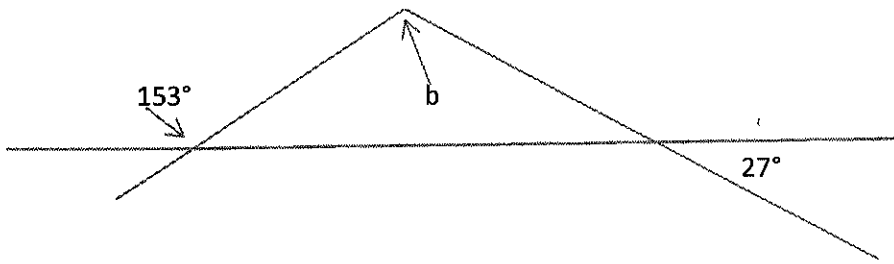
10)



Name: _____

$a =$ _____

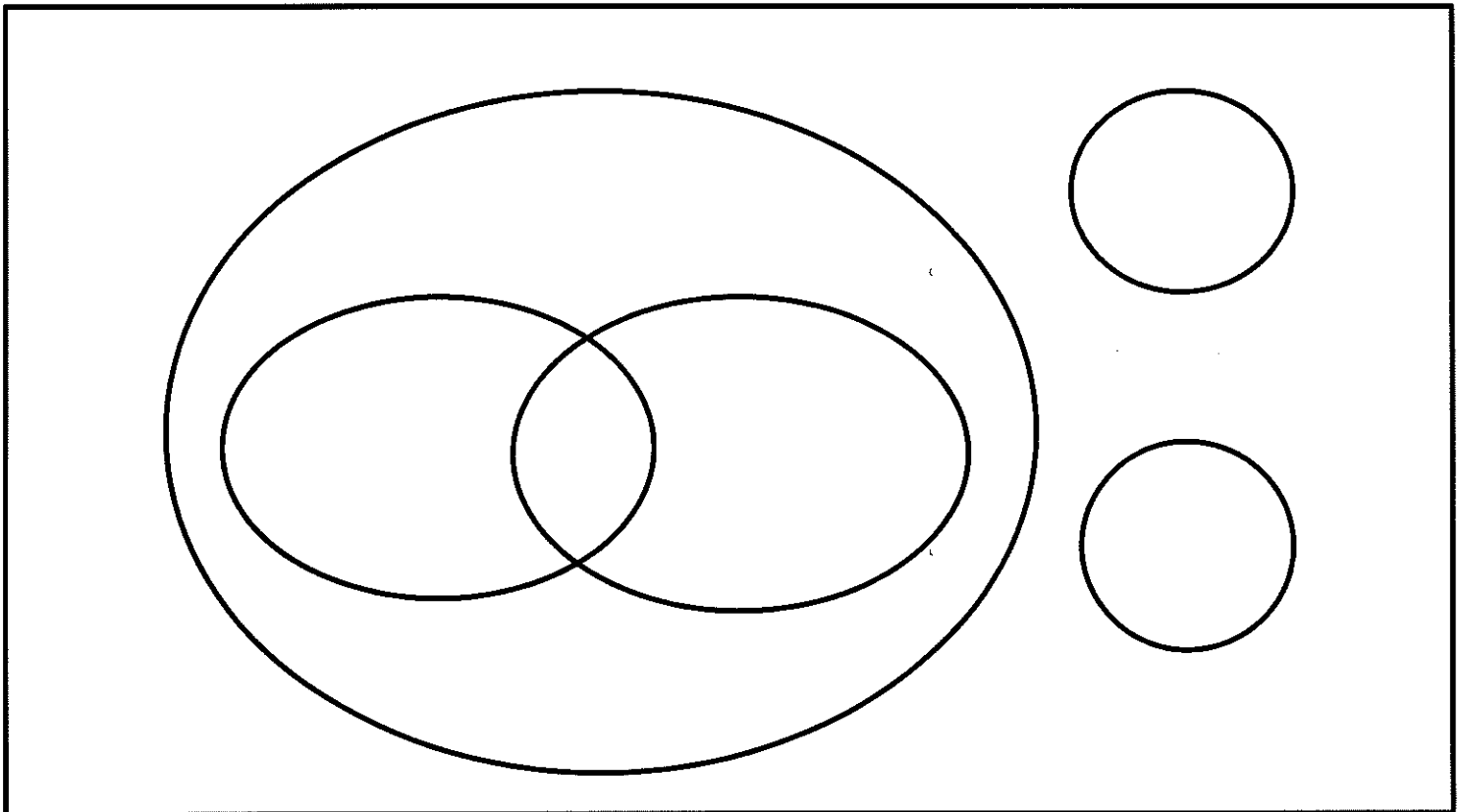
11)



Name: _____

b= _____

12) Fill in the diagram below with the following quadrilateral names: squares, rectangles, parallelograms, trapezoids, quadrilaterals, rhombi, and kites. (6 points)



6) Using your protractor, draw a pair of adjacent angles where the sum of the angles is 135° .

Label all the angle measures on this construction. (4 points)

7) Draw two vertical angles where each has a measure of 15° .

Label all the angle measures on this construction. (4 points)

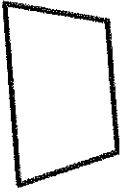
8) Two angles are vertical angles.

a) What is their measure if they are also complementary angles? (2 points)

b) What is their measure if they are also supplementary angles? (2 points)

13) Give the name that best describes the following quadrilaterals: (2 points)

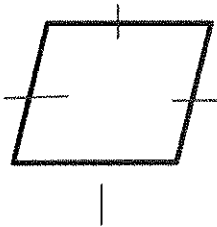
a.



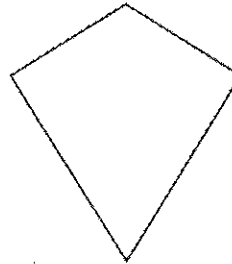
b.



c.



d.



14. Which of the three triangle lengths will create a triangle? Explain how you know which will work. (4 points)

a) 13, 5, 6 cm

b) 3, 3, 3, cm

c) 2, 7, 6 cm