

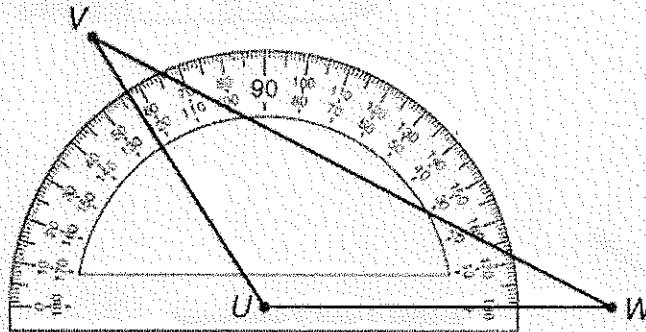
Name Key
Date _____

Pre-Algebra

Unit 3 Quest - Geometry (70 points)

Part 1: Angles

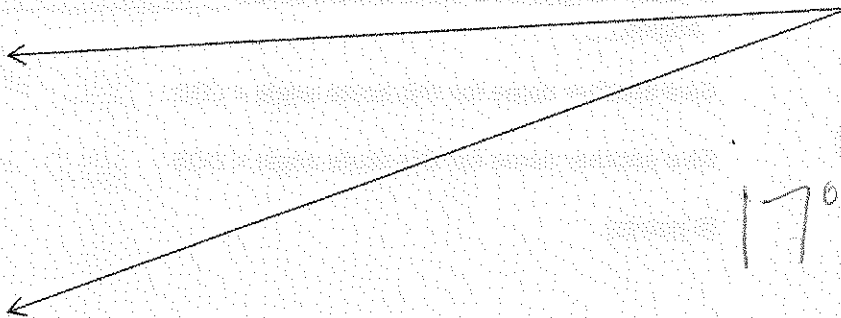
1) Triangle VUW is shown below.



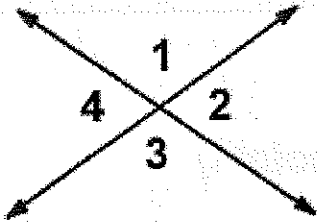
What is the measure of $\angle VUW$ to the nearest degree? (2 points)

- 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

Vertical. Are these

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

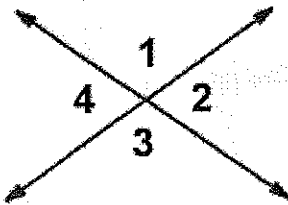
If $\angle 1$ is 112° , what is the measure of:

$\angle 2$ 68 (2 points)

$\angle 3$ 112 (2 points)

$\angle 4$ 68 (2 points)

4)



Angles 2 and 3 will equal 180 degrees because they are Supplementary angles. (4 pts)

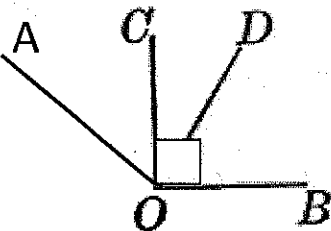
If $\angle 4$ is 66° , what is the measure of:

$\angle 1$ 114° (2 points)

$\angle 2$ 66° (2 points)

$\angle 3$ 114° (2 points)

5)



Adjacent angles COD and DOB are called Complementary angles.

Give another name for this acute angle $\angle COD$: DOC or O

Give another name for this acute angle $\angle DOB$: BOD or O

(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)

ans. vary

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)

45°

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

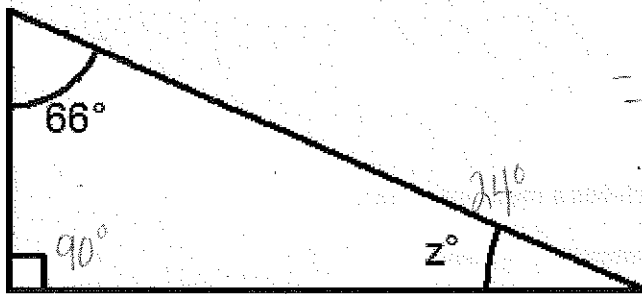
90°

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)

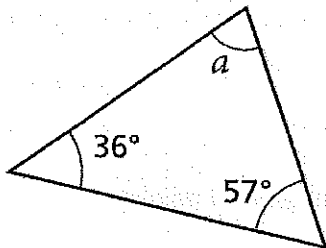


$$\begin{array}{r} 7. \\ 180 \\ -156 \\ \hline 24 \end{array}$$

Name: right scalene

z = 24°

10)



$$\begin{array}{r} 57 \\ 36 \\ \hline 93 \end{array}$$

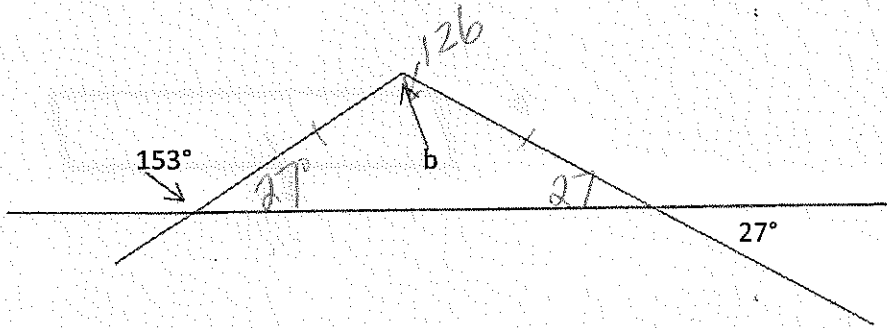
$$\begin{array}{r} 180 \\ -93 \\ \hline 87 \end{array}$$

Name: acute scalene

x = 87°

a= _____

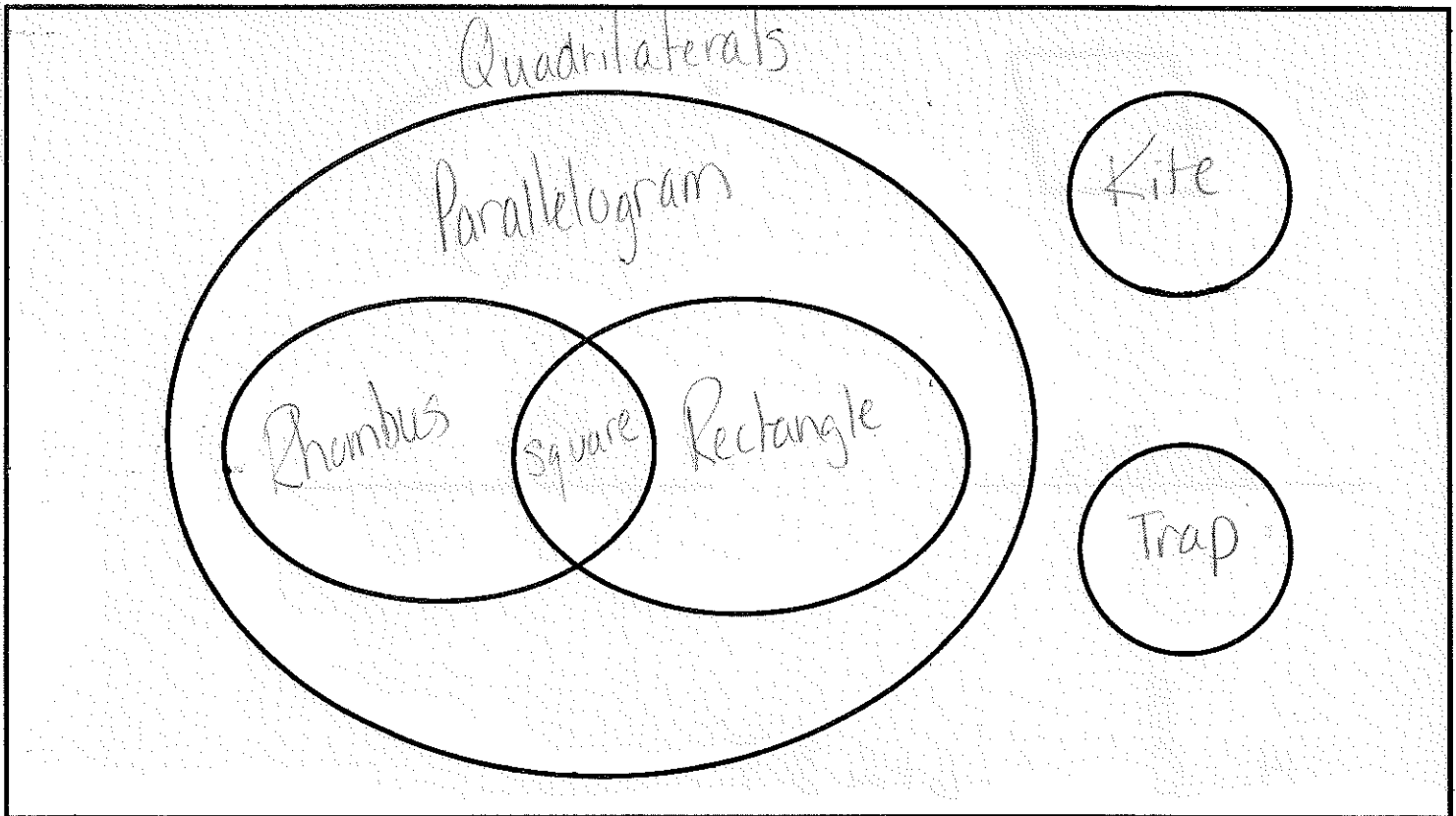
11)



Name: obtuse isosceles

b= 126°

12) Fill in the diagram below with the following quadrilateral names: squares, rectangles, parallelograms, trapezoids, quadrilaterals, rhombi, and kites. (8 points)



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

a.



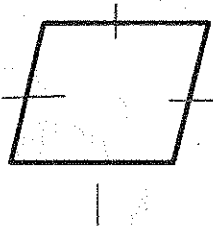
trapezoid

b.



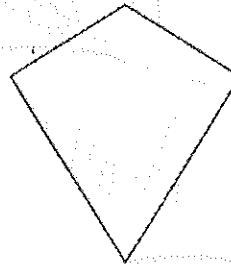
parallelogram

c.



rhombus

d.



Kite

14. B
C

6+2 77