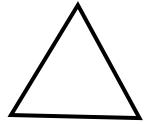


Name: _____ Date _____ Period _____

BERNOULLI WAS A "BIRD-BRAIN"

You are working with triangles and the solids that can be constructed from them tetrahedral. Working this sheet as you go will help you find out many interesting principles of geometry. You will need a ruler, and a protractor.

1. You have just connected 3 straws to make a triangle.



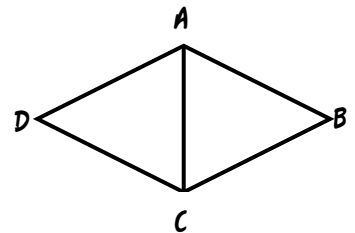
Record all the facts you know about it.

Number of sides? _____ Length of each side = _____

All sides are _____ Height of the triangle = _____

This is a(n) _____ triangle.

2. By adding two more straws, you have a _____.



Record all the facts you know about it.

Number of sides? _____ Length of each side = _____

All sides are _____ Height of the rhombus = _____

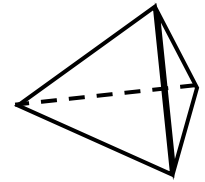
\overline{AB} is _____ to \overline{CD} (direction) \overline{AD} is _____ to \overline{BC} (direction)

A rhombus is a type of a(n) _____.

Area of the rhombus= _____

Area = bh

Name: _____ Date _____ Period _____



3. When you added the last straw, you made a tetrahedron.
 This is 3-dimensional figure having length, width, and height.
 It is a _____ tetrahedron called a _____.
 What is the ratio of covered sides to total number of sides? _____
 How many triangular faces does it have? _____ All sides are _____
 Measure the length: _____ Width: _____ Height: _____
 What is the Surface Area of the tetrahedron? _____

4. When the kite is assembled, what shape is _____
 How many triangular faces does it have? _____ All sides are _____
 Measure the length: _____ Width: _____ Height: _____
 What is the Surface Area of the tetrahedron? _____
 What is the ratio between covered and uncovered triangles in the whole kite?

The entire kite is "similar" to one cell.

What is the same? _____

What is different _____
