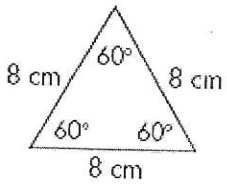
Name _____

CLASSWORK
15-2

Triangles

You can classify triangles by the lengths of their sides and the sizes of their angles.

acute
all angles less than 90°

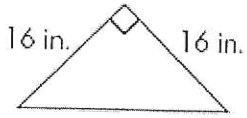


equilateral
all sides the same length

This triangle is both equilateral and acute.

Not all acute triangles are equilateral.

right
one right angle

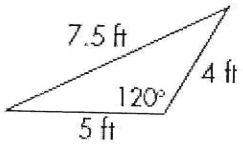


isosceles
two sides the same length

This triangle is both isosceles and right.

Not all right triangles are isosceles.

obtuse
one obtuse angle



scalene
no sides the same length

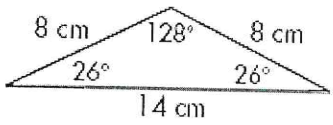
This triangle is both scalene and obtuse.

Not all obtuse triangles are scalene.

Remember that the sum of the measures of the angles of a triangle is 180°.

Classify each triangle by its sides and then by its angles.

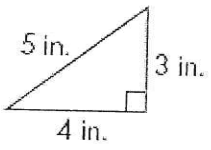
1.



_____

_____

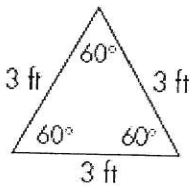
2.



_____

_____

3.



_____

_____

Classify the following triangles based on the angles given.

4. 40°, 100°, 40° _____

5. 14°, 98°, 68° _____

6. 38°, 38°, 104° _____

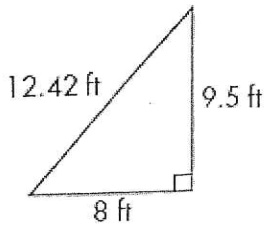
Name _____

HW
15-2

Triangles

Classify each triangle by its sides and then by its angles.

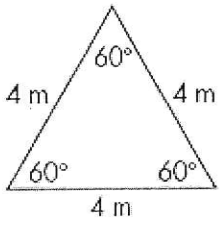
1.



_____

_____

2.



_____

_____

Given the measures of the angles for a triangle, classify the triangle by angles.

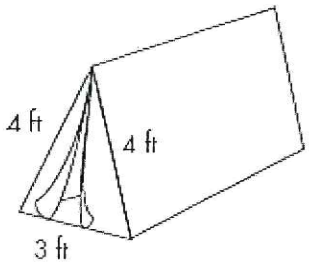
3. 47°, 62°, 71° _____

4. 29°, 90°, 61° _____

5. 75°, 75°, 30° _____

6. 54°, 36°, 90° _____

7. Judy bought a new tent for a camping trip. Look at the side of the tent with the opening to classify the triangle by its sides and its angles.



_____

8. Which describes a scalene triangle?

A 4 equal sides **B** 3 equal sides **C** 2 equal sides **D** 0 equal sides

9. The lengths of two sides of a triangle are 15 in. each. The third side measures 10 in. What type of triangle is this? Explain your answer using geometric terms.

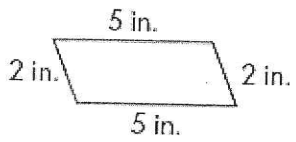
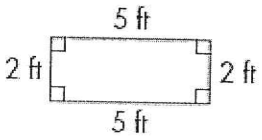
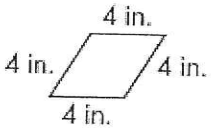
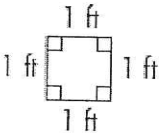
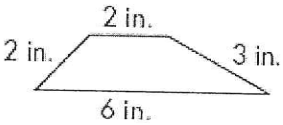
_____

_____

Name _____

CLASSWORK
15-3

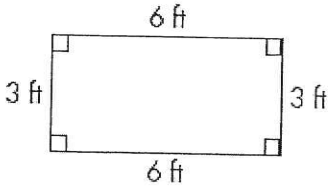
Properties of Quadrilaterals

Quadrilateral	Definition	Example
Parallelogram	A quadrilateral with both pairs of opposite sides parallel and equal in length	
Rectangle	A parallelogram with four right angles	
Rhombus	A parallelogram with all sides the same length	
Square	A rectangle with all sides the same length	
Trapezoid	A quadrilateral with only one pair of parallel sides	

Remember that the sum of the measures of the angles of a quadrilateral is 360°.

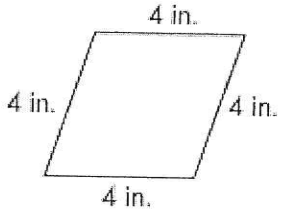
Classify each quadrilateral. Be as specific as possible.

1.



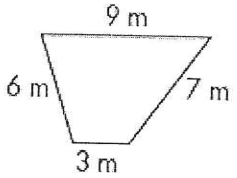
_____

2.



_____

3.



_____

4. How is a square similar to a rhombus? How is it different?

_____

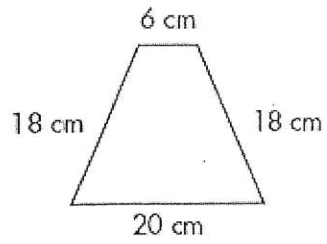
Name _____

HW
15-3

Properties of Quadrilaterals

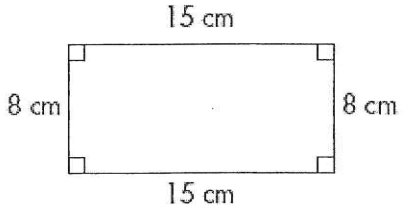
Classify each quadrilateral. Be as specific as possible.

1.



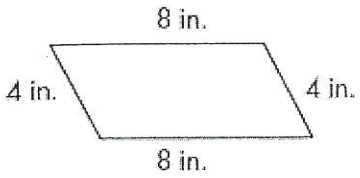
_____

2.



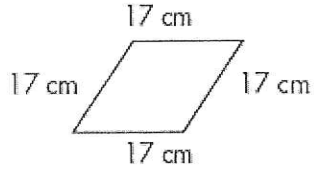
_____

3.



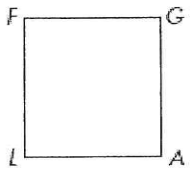
_____

4.



_____

5. Name the vertices of the square to the right.



_____

6. The angles of a quadrilateral measure 80°, 100°, 100° and 80° in this order. What kind of quadrilateral has this shape? How do you know?

_____

_____

_____

7. Can a trapezoid have four obtuse angles? Explain.

_____

_____

_____