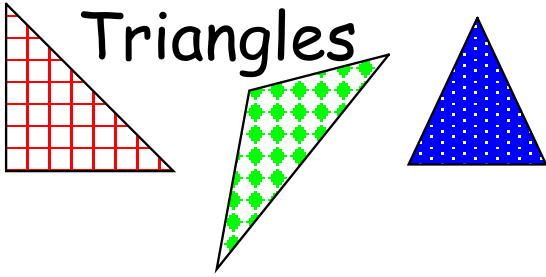


# Notes - Classifying Triangles

## Classifying Triangles

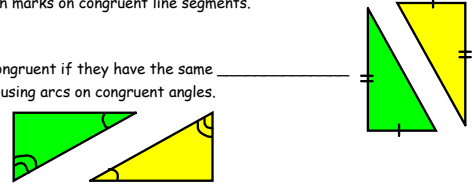


## What is Congruent?

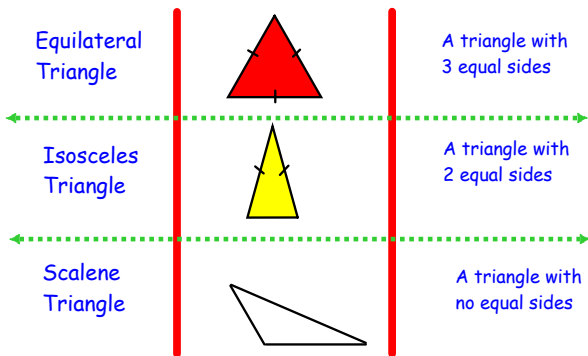
- The symbol for congruence is \_\_\_\_\_

- Two line segments are congruent if they have the same \_\_\_\_\_ and it is shown by using hash marks on congruent line segments.

- Two angles are congruent if they have the same \_\_\_\_\_ and it is shown by using arcs on congruent angles.



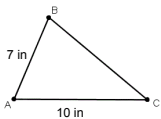
### Classified by the lengths of their sides



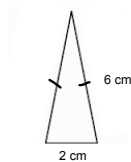
### Identify each Triangle as Isosceles, Scalene, or Equilateral.

Isosceles	Scalene	Equilateral

### Find the missing side lengths and classify the triangle by its sides.



Sum of all sides: 29 in  
 Missing side length: \_\_\_\_\_  
 Type of triangle: \_\_\_\_\_



Missing side length: \_\_\_\_\_  
 Type of triangle: \_\_\_\_\_

### Congruent Sides and Angles

- If two \_\_\_\_\_ in a triangle have the same length (isosceles), then the opposite \_\_\_\_\_ have the same measure.  
 (add the appropriate markings to show congruence)

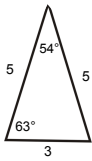


- If two \_\_\_\_\_ in a triangle have the same measure, then the opposite \_\_\_\_\_ have the same lengths.  
 (add the appropriate markings to show congruence)

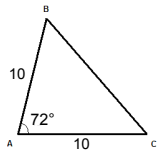


# Notes - Classifying Triangles

Find the missing angle measures.

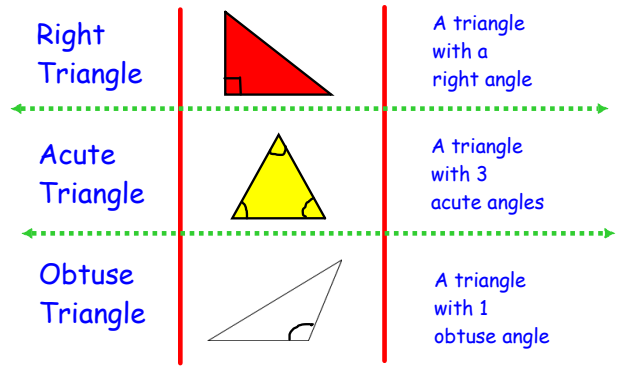


Missing angle measure: \_\_\_\_\_  
Type of triangle: \_\_\_\_\_



Sum of all angles: 180  
Missing angle measure: \_\_\_\_\_  
Type of triangle: \_\_\_\_\_

Classified by the measure of their angles

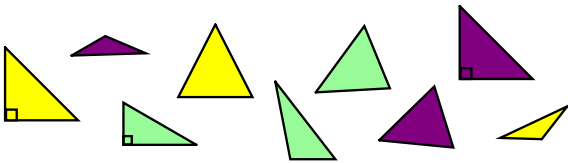
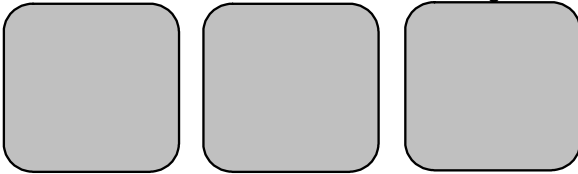


Identify each Triangle as Obtuse, Acute, or Right

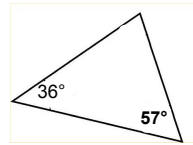
Acute

Obtuse

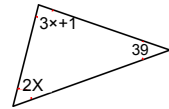
Right



Find the missing angle measures.



Sum of all angles: 180  
Missing angle measure: \_\_\_\_\_  
Type of triangle: \_\_\_\_\_



Sum of all angles: 180  
Missing angle measure: \_\_\_\_\_  
Type of triangle: \_\_\_\_\_

## Matching!

- |  |                |
|--|----------------|
| 1. _____ Angle measures: $30^\circ, 60^\circ, 90^\circ$  | A. Isosceles   |
| 2. _____ Side lengths: 2cm, 2cm, 2cm                     | B. Scalene     |
| 3. _____ Angle measures: $60^\circ, 60^\circ, 60^\circ$  | C. Right       |
| 4. _____ Side lengths: 6m, 3m, 6m                        | D. Obtuse      |
| 5. _____ Side lengths: 5ft, 7ft, 9ft                     | E. Equilateral |
| 6. _____ Angle measures: $20^\circ, 125^\circ, 35^\circ$ | F. Equiangular |