


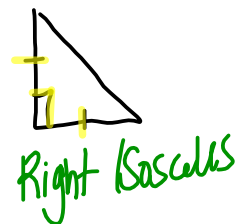


Classifying Triangles (By sides)

1. Isosceles - 2 sides are the same 
2. Equilateral - All 3 sides the same 
3. Scalene - No sides are the same 

Classifying Triangles (By angles)

1. Acute - 3 acute angle
2. Obtuse - 1 obtuse angle
3. Right - 1 Right angle

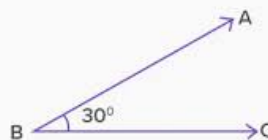


* The angles in a triangle ALWAYS add up to 180° *

Classifying and Naming Angles

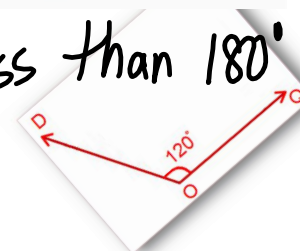
Classifying Angles

Acute - less than 90°



Obtuse - More than 90° BUT less than 180°

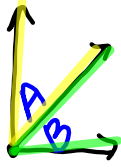
Right - exactly 90° 



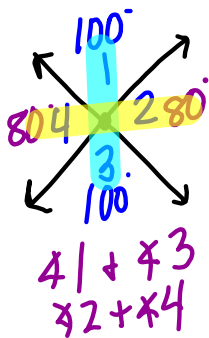
 Straight - Exactly 180° 

Angle Relationships

Adjacent Angles - Angles that share an endpoint and Side (Right Next to each other)

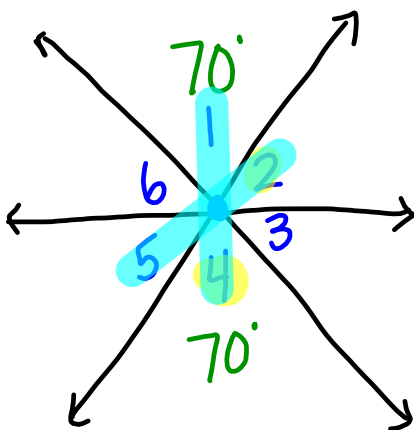


Vertical Angles - Are across from each other and share an end point (vertex)



* They are Congruent *
↳ Exactly the Same/
Equal

Identify the angles as adjacent, vertical or neither



① $\angle 3$ + $\angle 4$ - Adjacent

$\angle 1$ & $\angle 3$ - Vertical

$\angle 2$ & $\angle 4$ - Neither

If $\angle 4$ is 70° , what is the measure of $\angle 1$?

Naming Angles

①

Obtuse - classification

$\sphericalangle ABC$ $\sphericalangle B$
 $\sphericalangle CBA$ $\sphericalangle 1$

②

acute

$\sphericalangle EFG$ $\sphericalangle 2$
 $\sphericalangle GFE$
 $\sphericalangle F$

On Your Own:

Name each angle in four ways. Then classify the angle as acute, right, obtuse, or straight. (Example 1)

1.

$\sphericalangle ABC$ $\sphericalangle 4$
 $\sphericalangle CBA$
 $\sphericalangle B$ acute

2.

$\sphericalangle DEF$ $\sphericalangle 5$
 $\sphericalangle FED$ right
 $\sphericalangle E$

3.

$\sphericalangle MNP$
 $\sphericalangle PNM$ obtuse
 $\sphericalangle N$
 $\sphericalangle 1$

Identify Structure Refer to the diagram at the right. Identify each angle pair as adjacent, vertical, or neither. (Example 2)

4. $\sphericalangle 2$ and $\sphericalangle 5$ Vertical

5. $\sphericalangle 4$ and $\sphericalangle 6$ Neither

6. $\sphericalangle 3$ and $\sphericalangle 4$ Adjacent

7. $\sphericalangle 5$ and $\sphericalangle 6$ Adjacent

8. $\sphericalangle 1$ and $\sphericalangle 3$ Neither

9. $\sphericalangle 1$ and $\sphericalangle 4$ Vertical

Classify each triangle by each angles and sides.

7)

Acute Equilateral

8)

Acute Scalene

9)

Right Scalene

10)

obtuse Isosceles