

Name: \_\_\_\_\_

## **Geometry Introduction**

Complete the following steps **IN ORDER**. This WILL be turned in for a classwork grade.

### **CLASSIFY ANGLES**

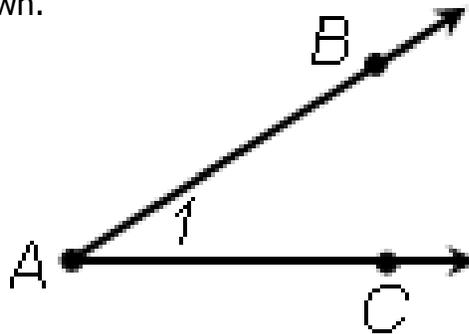
Watch the two videos and complete the graphic organizer on angle classifications.

<https://www.youtube.com/watch?v=BzCgb9lqZLw>

<https://www.youtube.com/watch?v=NVuMULQjb3o>

Complete the guided notes as you watch the first video.

1) Label the rays and vertex of the angle shown.



2) Name the angle THREE ways.

|  |
|--|
|  |
|  |
|  |

3) Define and draw an example for each term below.

| <b>Term</b>           | <b>Definition</b> | <b>Example</b> |
|-----------------------|-------------------|----------------|
| <b>Right Angle</b>    |                   |                |
| <b>Acute Angle</b>    |                   |                |
| <b>Obtuse Angle</b>   |                   |                |
| <b>Straight Angle</b> |                   |                |

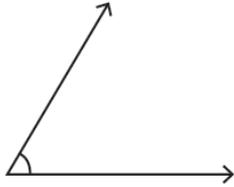
4) Complete the problems below.

### Classifying Angles

L151

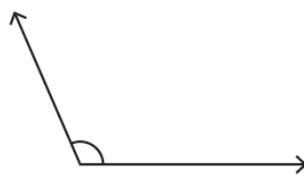
Classify each angle as acute, obtuse, right or straight.

1)



Type : \_\_\_\_\_

2)



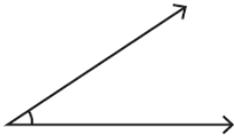
Type : \_\_\_\_\_

3)



Type : \_\_\_\_\_

4)



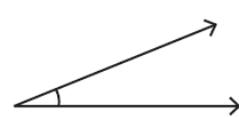
Type : \_\_\_\_\_

5)



Type : \_\_\_\_\_

6)



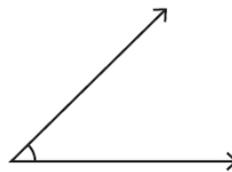
Type : \_\_\_\_\_

7)



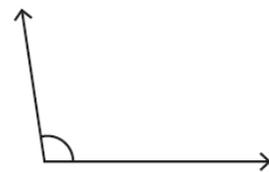
Type : \_\_\_\_\_

8)



Type : \_\_\_\_\_

9)



Type : \_\_\_\_\_

10)  $49^\circ$

Type : \_\_\_\_\_

11)  $82^\circ$

Type : \_\_\_\_\_

12)  $180^\circ$

Type : \_\_\_\_\_

## CLASSIFY TRIANGLES

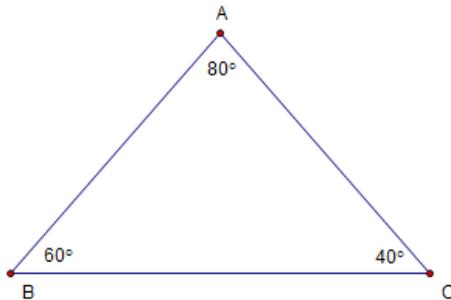
1) Watch the following video and read the triangle review link to complete the guided notes.

<https://www.khanacademy.org/math/geometry-home/triangle-properties/geometry-classifying-triangles/v/scalene-isosceles-equilateral-acute-right-obtuse>

<https://www.khanacademy.org/math/geometry-home/triangle-properties/geometry-classifying-triangles/a/types-of-triangles-review>

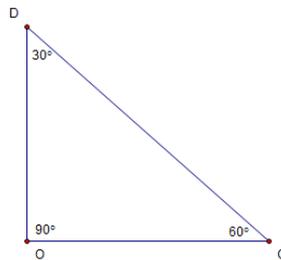
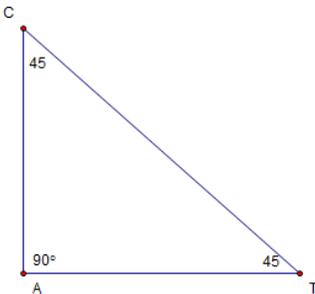
### ACUTE TRIANGLES

Acute triangles have three \_\_\_\_\_ angles, which means they are all \_\_\_\_\_ 90 degrees.



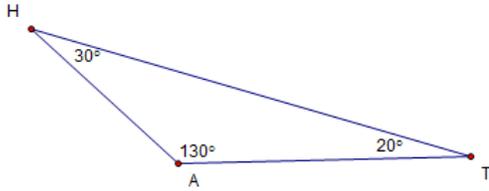
### RIGHT TRIANGLES

A right triangle, has \_\_\_\_\_ angle that measures \_\_\_\_\_ degrees.



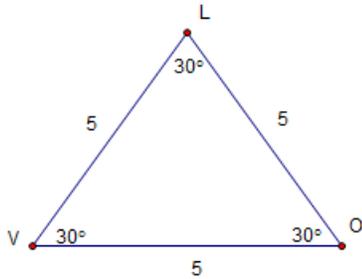
## OBTUSE TRIANGLES

Obtuse triangles have \_\_\_\_\_ angle that is \_\_\_\_\_, which means it is \_\_\_\_\_ 90 degrees.



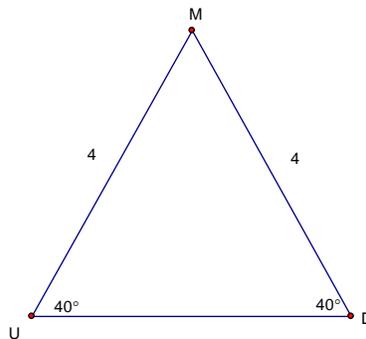
## EQUALATERAL TRIANGLE

Triangles that have \_\_\_\_\_ sides and \_\_\_\_\_ angles



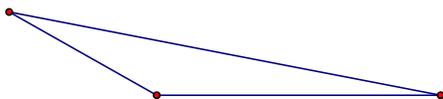
## ISOSOCLESES TRIANGLE

Triangles that have \_\_\_\_\_ sides, and \_\_\_\_\_ angles.



## SCALENE TRIANGLE

Triangles that have \_\_\_\_\_ sides or angles equal.



2) Complete **BOTH** sets of practice problems below. Take a screen shot of your results.

<https://www.khanacademy.org/math/geometry-home/triangle-properties/geometry-classifying-triangles/e/identifying-triangles-by-angles>

<https://www.khanacademy.org/math/geometry-home/triangle-properties/geometry-classifying-triangles/e/recognizing-triangles>

### **COMPLEMENTARY & SUPPLEMENTARY ANGLES**

1) Watch the video on complementary and supplementary angles. Complete the notes below.

<https://www.youtube.com/watch?v=GO20ZgUzlc0>

2) Define and draw an example of each:

| <b>Term</b>                 | <b>Definition</b> | <b>Example</b> |
|-----------------------------|-------------------|----------------|
| <b>Complementary Angles</b> |                   |                |
| <b>Supplementary Angles</b> |                   |                |

3) Give one of the three ways described in the video to remember complementary and supplementary angles.

4) Watch the video on solving for missing angles:

[https://www.youtube.com/watch?v=\\_7FwqgcCSA0](https://www.youtube.com/watch?v=_7FwqgcCSA0)

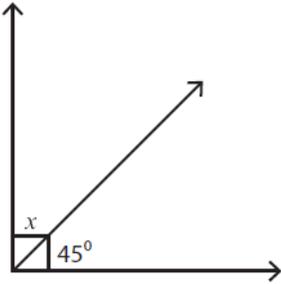
5) Solve the following:

## Complementary Angles

Standard: S1

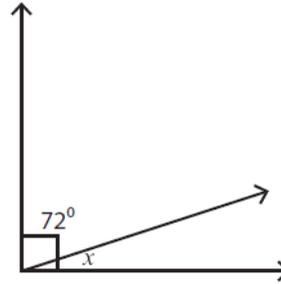
Find the value of  $x$  in each right angle.

1)



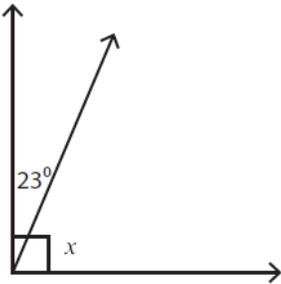
$$x = \underline{\hspace{2cm}}$$

2)



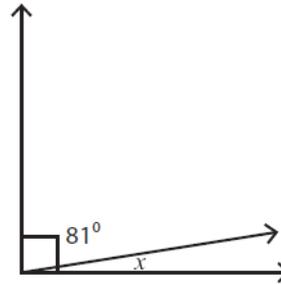
$$x = \underline{\hspace{2cm}}$$

3)



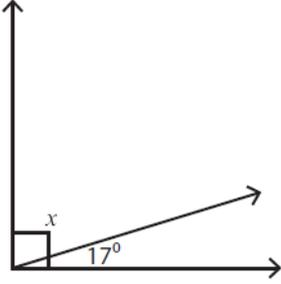
$$x = \underline{\hspace{2cm}}$$

4)



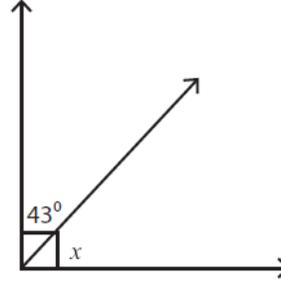
$$x = \underline{\hspace{2cm}}$$

5)



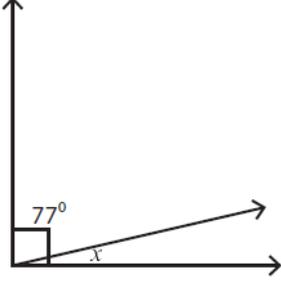
$$x = \underline{\hspace{2cm}}$$

6)



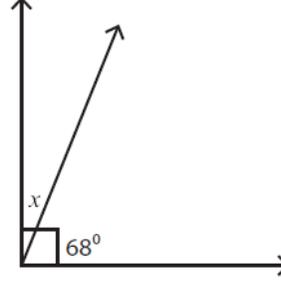
$$x = \underline{\hspace{2cm}}$$

7)



$$x = \underline{\hspace{2cm}}$$

8)



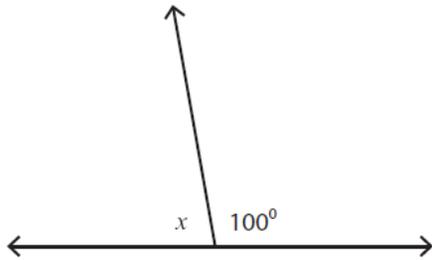
$$x = \underline{\hspace{2cm}}$$

# Supplementary Angles

Standard: S1

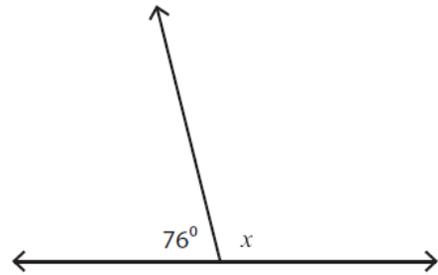
Find the value of  $x$  in each linear pair.

1)



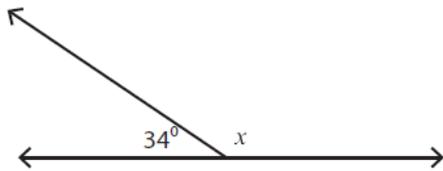
$x = \underline{\hspace{2cm}}$

2)



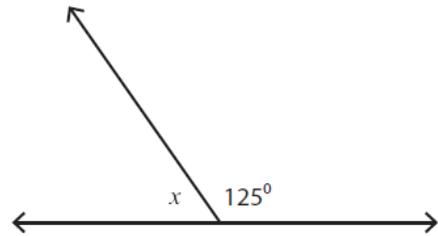
$x = \underline{\hspace{2cm}}$

3)



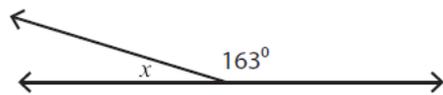
$x = \underline{\hspace{2cm}}$

4)



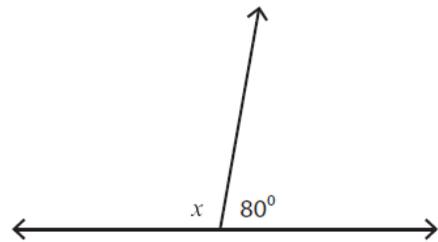
$x = \underline{\hspace{2cm}}$

5)



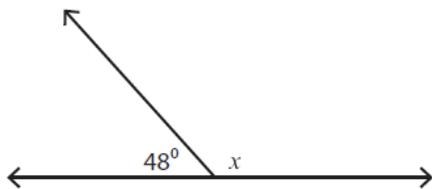
$x = \underline{\hspace{2cm}}$

6)



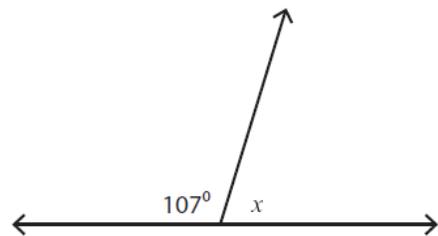
$x = \underline{\hspace{2cm}}$

7)



$x = \underline{\hspace{2cm}}$

8)



$x = \underline{\hspace{2cm}}$