- Trig Functions are ratios used to find missing $\qquad$ or $\qquad$ in triangles
- We will focus on three trig functions $\rightarrow$
- $\qquad$ (sine)
- _____ (cosine)
- $\qquad$ (tangent)
- When finding missing sides/angles, you will be required to label the sides of the triangle according to their relationship to a given angle. The sides will either be:

1. $\qquad$ (if it doesn't touch the angle)
2. $\qquad$ (if it isn't the hypotenuse but touches the angle)
3. $\qquad$ (if it directly across from the right angle)

- First, identify the hypotenuse, then the other two sides will be easier to label
- In trig functions, the variable $\theta$ (the Greek letter theta) is often used instead of x

1. In the right triangle shown here, identify each of the sides as opposite, adjacent, or hypotenuse based on their relation to the angle $\theta$

2. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the angle $\theta$.

- Opposite = $\qquad$
- $\operatorname{Adjacent}=$ $\qquad$
- $\quad$ Hypotenuse = $\qquad$


3. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the angle $\theta$.

- Opposite = $\qquad$
- Adjacent = $\qquad$
- $\quad$ Hypotenuse $=$ $\qquad$


4. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the angle $t$.

- 0 pposite $=$ $\qquad$
- Adjacent $=$ $\qquad$
- $\quad$ Hypotenuse $=$ $\qquad$


5. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the $46^{\circ}$ angle.

- 0 pposite $=$ $\qquad$
- Adjacent $=$ $\qquad$
- $\quad$ Hypotenuse $=$ $\qquad$


6. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the $46^{\circ}$ angle.

- Opposite = $\qquad$
- $\operatorname{Adjacent}=$ $\qquad$
- $\quad$ Hypotenuse $=$ $\qquad$


7. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the angle $\theta$.

- $0 p p o s i t e=$ $\qquad$

- $\quad$ Hypotenuse $=$ $\qquad$

8. Given the right triangle to the right, identify which side represents the opposite, adjacent or hypotenuse of the angle $\theta$.

- Opposite = $\qquad$
- Adjacent $=$ $\qquad$

- $\quad$ Hypotenuse $=$ $\qquad$

Identify each side of the triangle below based on the angle $\theta$.


Opposite $=$ $\qquad$
Adjacent $=$ $\qquad$
Hypotenuse = $\qquad$
'

Opposite $=$ $\qquad$
Adjacent = $\qquad$
Hypotenuse = $\qquad$
7.


Opposite $=$ $\qquad$
Adjacent = $\qquad$
Hypotenuse = $\qquad$
2.


Opposite = $\qquad$
Adjacent = $\qquad$
Hypotenuse = $\qquad$


Opposite = $\qquad$
Adjacent = $\qquad$
Hypotenuse = $\qquad$


Opposite = $\qquad$
Adjacent $=$ $\qquad$
Hypotenuse = $\qquad$
3.

Opposite $=$ $\qquad$
Adjacent $=$ $\qquad$
Hypotenuse $=$ $\qquad$
6.

Opposite $=$ $\qquad$
Adjacent = $\qquad$
Hypotenuse = $\qquad$
9.

Opposite $=$ $\qquad$
Adjacent = $\qquad$
Hypotenuse = $\qquad$

