## Main Ideas/ Questions

Using Distance and Slope

## **Notes**

**Characteristics of ALL Types of Triangles:** 

- Scalene –
- Isosceles –
- Equilateral –

Proving Congruent Sides – Find the \_\_\_\_\_ (use distance)

Right –

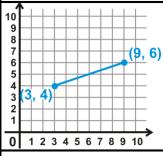
**Proving Right Angle** – Find two sides that are \_\_\_\_\_!

These slopes are \_\_\_\_\_ aka flipped and have

opposite signs

Quick Example

 $2 \rightarrow -\frac{1}{2}$ 

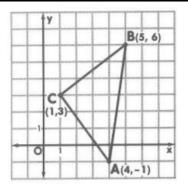


<u>Slope</u>

<u>Distance</u>

Examples

1. Prove that  $\triangle ABC$  is a right triangle.



2. Triangle AFN has vertices A(-5, 6), F(-1, 6), and N(-3, 1). Prove triangle AFN is an isosceles triangle.

