When positioning figures
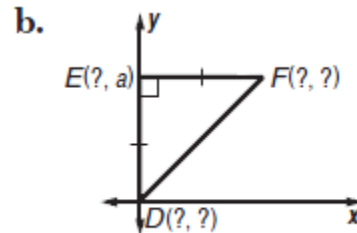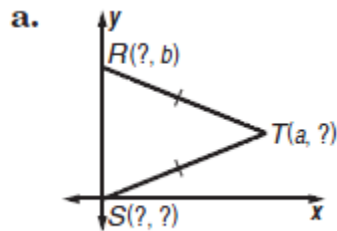- Place at least one side on an axis
- Use as few variables as possible for coordinates

<u>Ex 1</u> **Find the missing coordinates of each triangle.**

a.

$R(?, b)$

$T(a, ?)$

$S(?, ?)$

b.

$E(?, a)$ $F(?, ?)$

$D(?, ?)$

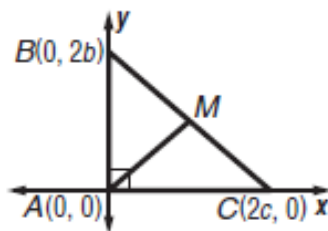**Another type of proof is called coordinate proof. In this type of proof we will calculate**

_____ to prove parallel or perpendicular statements, _____ to prove

congruency and _____ to find the coordinates of a midpoint.

<u>Ex 2</u> **Write a coordinate proof.**

Given: $\triangle ABC$ is a right triangle with hypotenuse $\overline{BC}$.
         M is the midpoint of $\overline{BC}$.
Prove: M is equidistant from the vertices.

$B(0, 2b)$

M

$A(0, 0)$ $C(2c, 0)$

Ex3 Tami and Juan are hiking. Tami hikes 300 feet east of the camp and then hikes 500 feet north. Juan hikes 500 feet west of the camp and then 300 feet north. Prove that Juan, Tami and the camp form a right triangle.