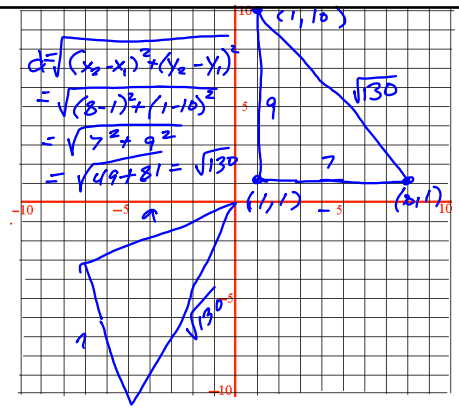
9.7 Triangle and Coordinate Proofs

How do you use coordinates
Not using angles

SSS
distance formula

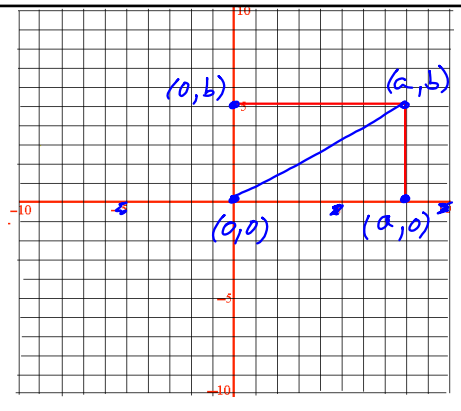


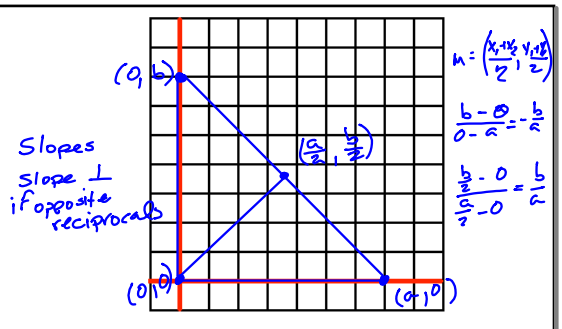
Standard Position

In Geometry, refers to a figure that has a side on an axis and a vertex at the origin or is centered on the origin

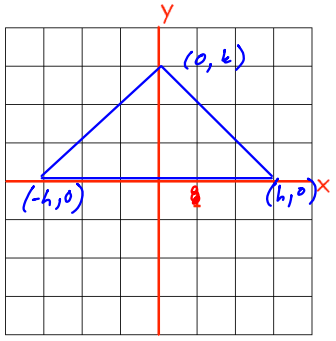
Standard Position

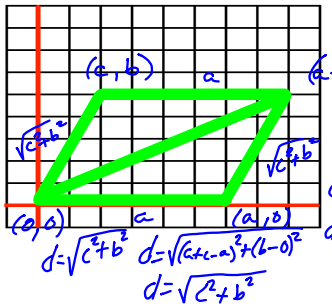
- uses variables to describe distance
- use a minimum number of variables
- use parallelograms rectangles triangles, trapezoid





Slopes
slope ⊥ if opposite reciprocals


y
(0, b)
(-h, 0)
(h, 0)
x


(c, b)
a
(a+c, b)
(0, 0)
a
(a, 0)
$\sqrt{c^2+b^2}$
$\sqrt{c^2+b^2}$
$d=\sqrt{(x_2-x_1)^2+(y_2-y_1)^2}$
$d=\sqrt{(a+c-c)^2+(b-b)^2}$
$d=\sqrt{a^2}=a$
$d=\sqrt{c^2+b^2}$
$d=\sqrt{(c+c-a)^2+(b-0)^2}$
$d=\sqrt{c^2+b^2}$