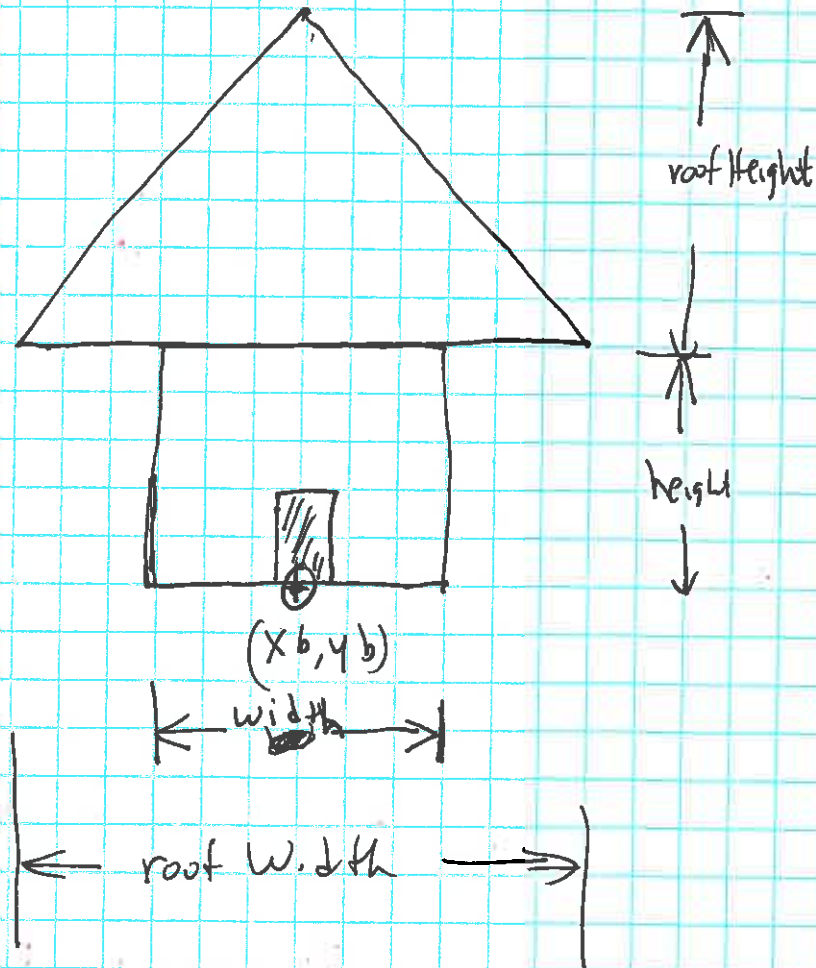


House ($x_b, y_b, \text{width}, \text{height}, \text{roofWidth}, \text{roofHeight}$)



$$\text{door width} = \frac{\text{width}}{6}$$

$$\text{door height} = \frac{\text{height}}{3}$$

Constraint: $\text{roof width} \geq \text{width}$