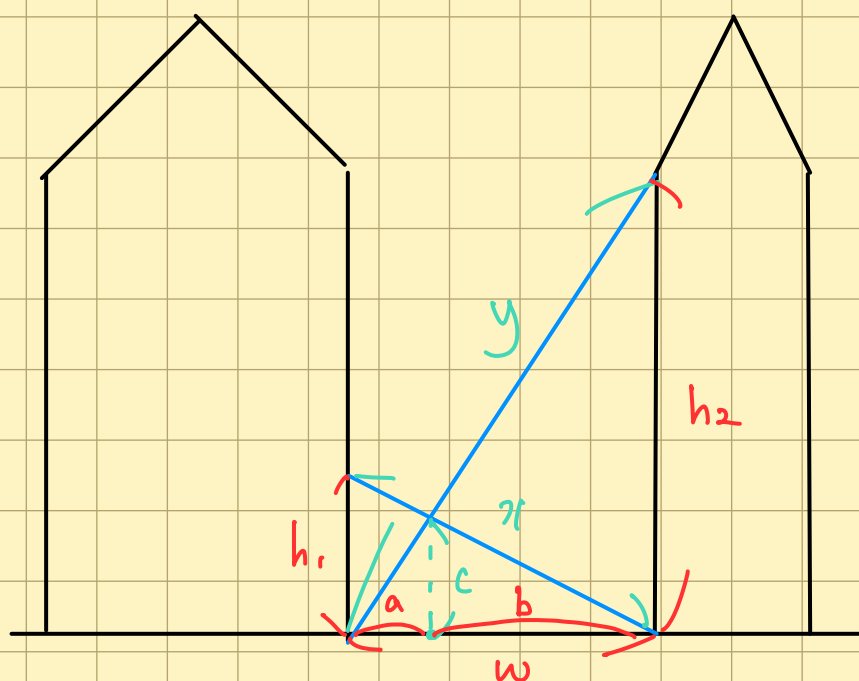


BOJ 2022 사다리



$$w : h_1 = b : c \quad w : h_2 = a : c$$

$$b = \frac{c \times w}{h_1}$$

$$a = \frac{c \times w}{h_2}$$

$$\frac{c \times w}{h_1} + \frac{c \times w}{h_2} = w$$

$$c(h_1 + h_2) = h_1 \times h_2$$

$$c = \frac{h_1 \times h_2}{h_1 + h_2}$$

$$h_1 = \sqrt{x^2 - w^2}$$

$$h_2 = \sqrt{y^2 - w^2}$$