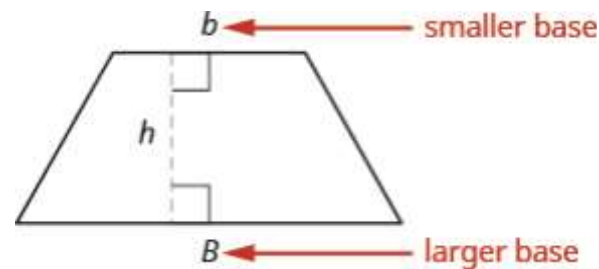# Using the Quadratic Formula in an Art Project

Project

- Make a self portrait with 10,000 trapezoids

- For #genuary2022

- Start with a selfie that is 100 x 100 pixels

- Area of each trapezoid matches brightness of each pixel in selfie

- Larger base is 16 pixels

- Height and smaller base the same

$$\text{Area}_{\text{trapezoid}} = \frac{1}{2}h\,(b + B)$$

Problem

- We know the area, we need to get the height