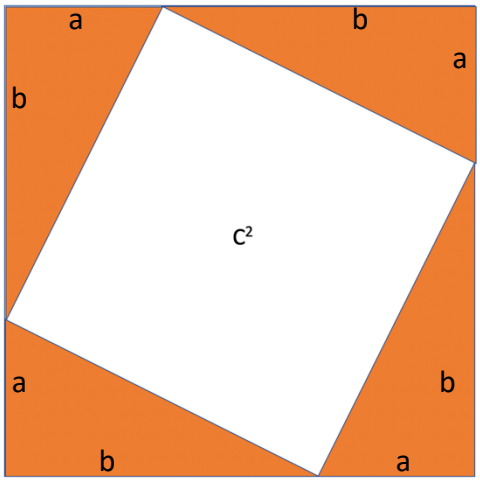
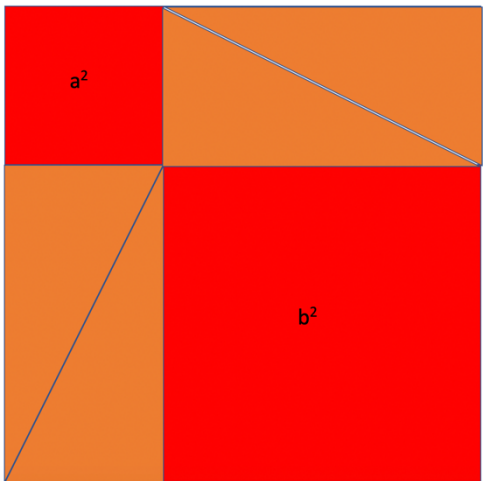
The following 2 images were created on the video. This is a more abstract reasoning through the proof for the students who are ready to move away from the concrete, tactile representations.





Images created by Mary Davis, Charles A. Dana Center for use in this video.

Each triangle in this figure has the area:
$\frac{1}{2}ab$

So, the area of the large square can be written:
$\frac{1}{2}ab + \frac{1}{2}ab + \frac{1}{2}ab + \frac{1}{2}ab + c^2$

Each orange rectangle has the area ab.

So, the area of the large square can be written:
$a^2 + 2ab + b^2$

Because we know that the 2 large squares are equal in size:

$$\frac{1}{2}ab + \frac{1}{2}ab + \frac{1}{2}ab + \frac{1}{2}ab + c^2 = a^2 + 2ab + b^2$$

$$2ab + c^2 = a^2 + 2ab + b^2$$
$$-2ab \qquad\qquad -2ab$$

Therefore, $c^2 = a^2 + b^2$