

# Teaching as Questioning through Peer Instruction



Teaching Academy  
New Mexico State University  
2 February, 2024, Las Cruces, NM



# Teaching as Questioning through Peer Instruction



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A group of people are gathered in a room, likely a classroom or workshop. Several individuals are seated at tables, working on laptops. In the foreground, a woman with dark hair is looking at a laptop screen that displays a website titled "learning catalysis". To her right, another woman is gesturing with her hand while talking. In the background, a man is standing and looking towards the camera. The word "program" is overlaid in the center of the image.

program

**1** context

A group of people are in a classroom or workshop setting. In the foreground, a woman with dark hair is gesturing with her hand while talking to a man. To her left, another woman is looking at a laptop. In the background, several other people are working at desks with laptops. A whiteboard is visible in the background. The word "program" is overlaid in the center of the image.

program

**1** context

**2** classify




program

1 context

2 classify

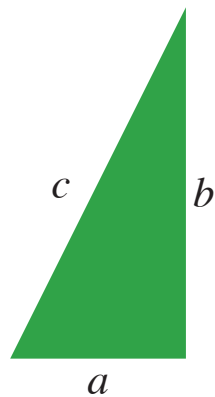
3 improve

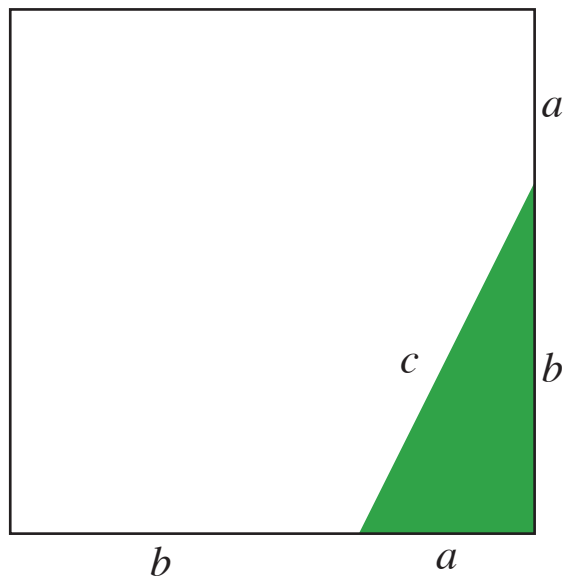


A group of students in a classroom setting, with laptops open on desks and a woman speaking. The scene is a modern classroom with large windows and a whiteboard. Several students are seated at long white tables, working on laptops. A woman in the foreground is speaking and gesturing with her hands. In the background, a man is standing and looking towards the camera. The overall atmosphere is collaborative and educational.

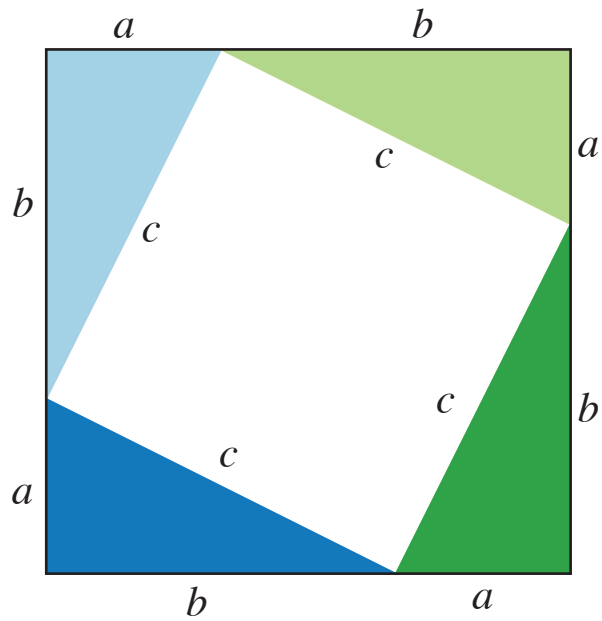
# Pythagorean theorem

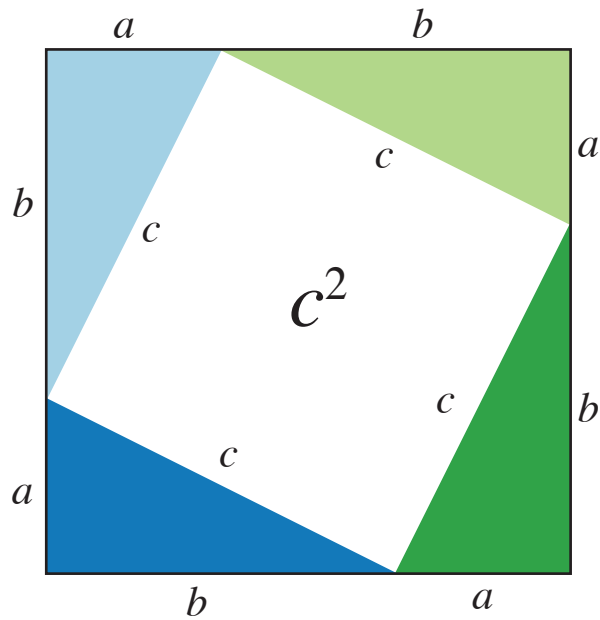
$$a^2 + b^2 = c^2$$

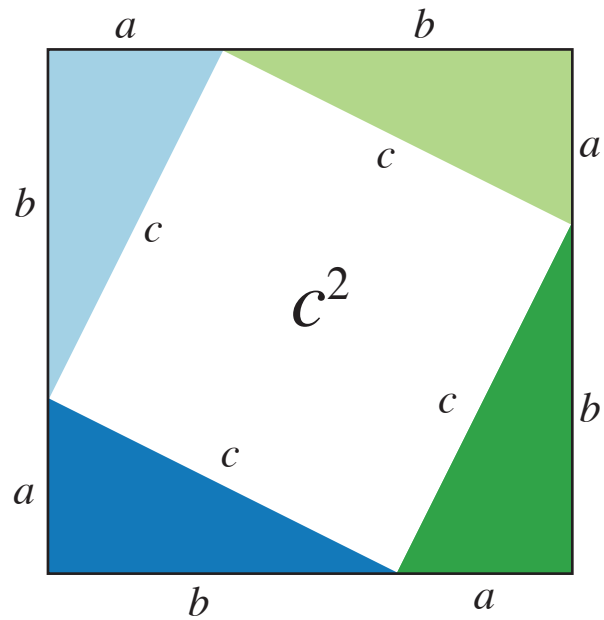
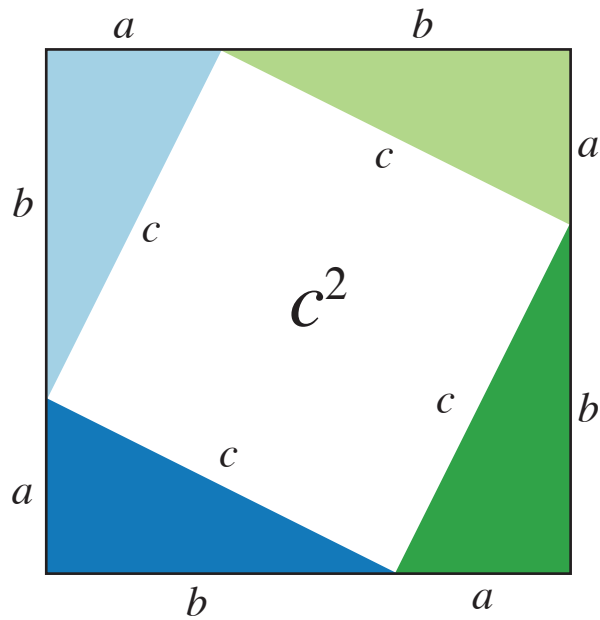




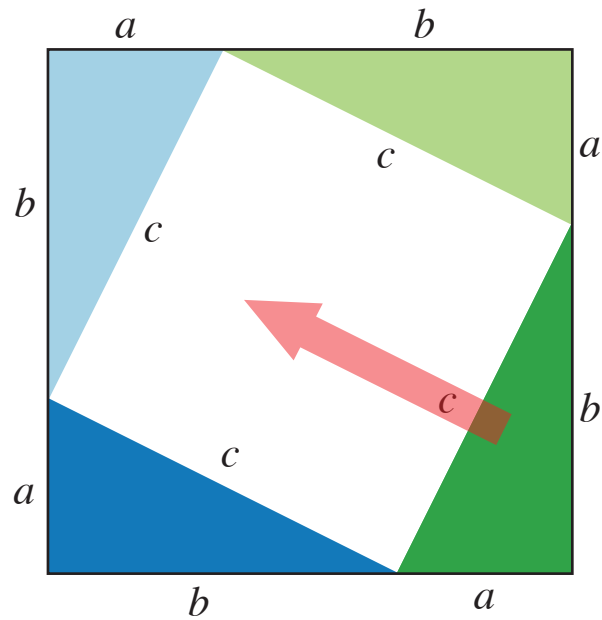
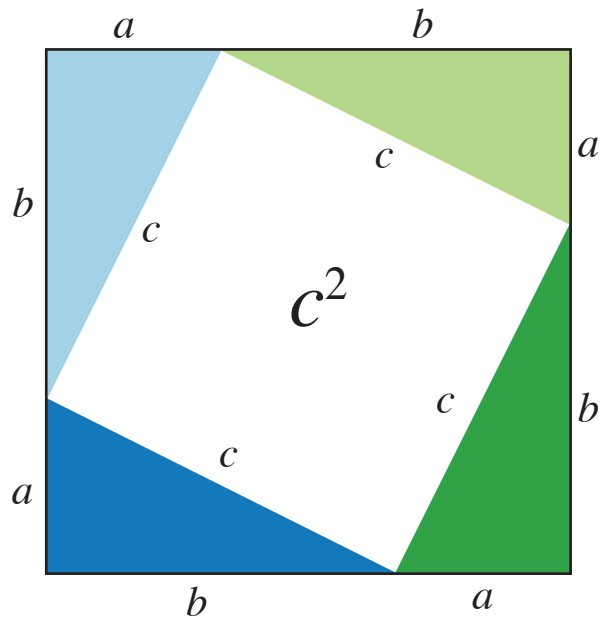


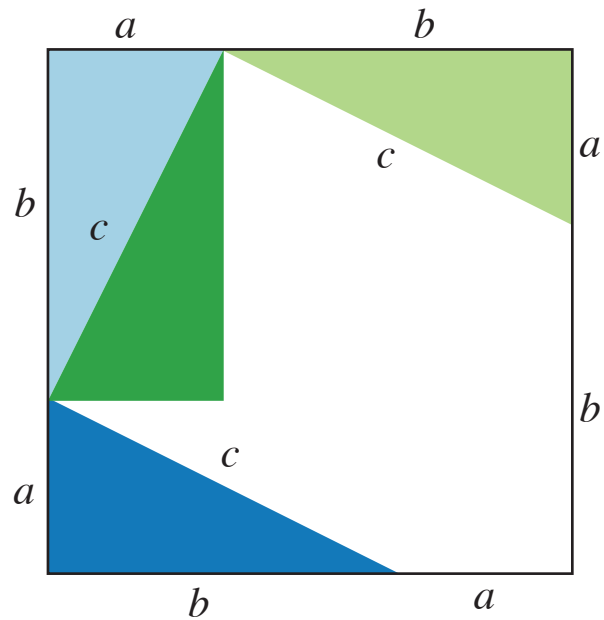
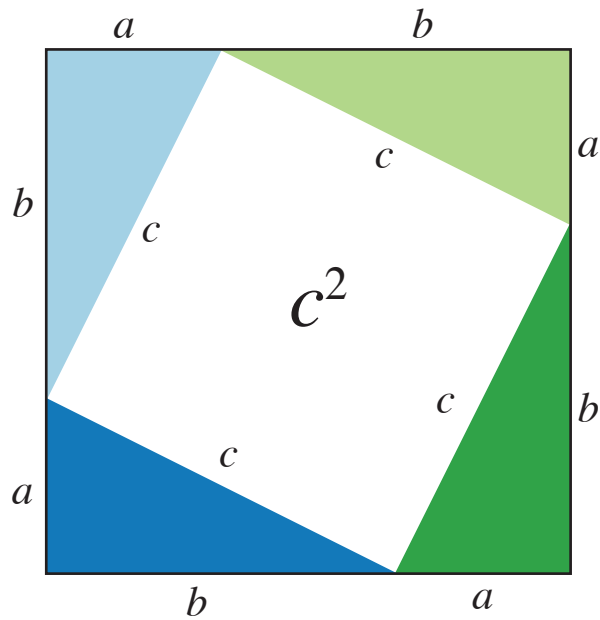


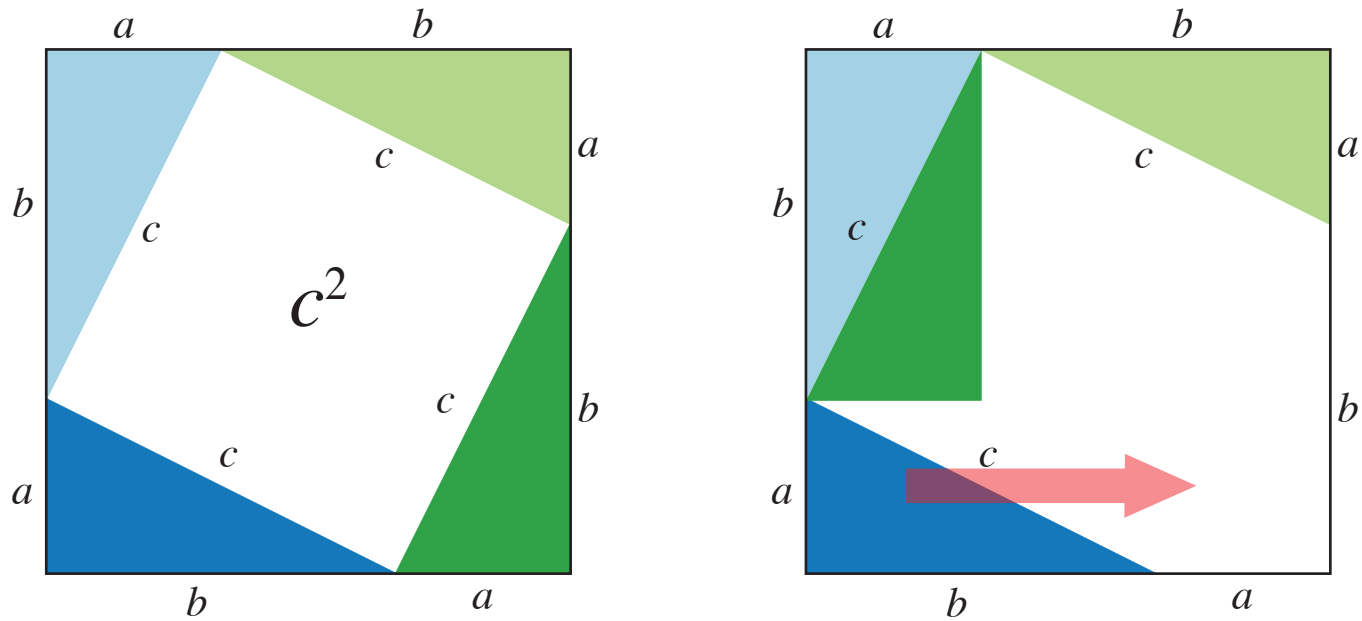




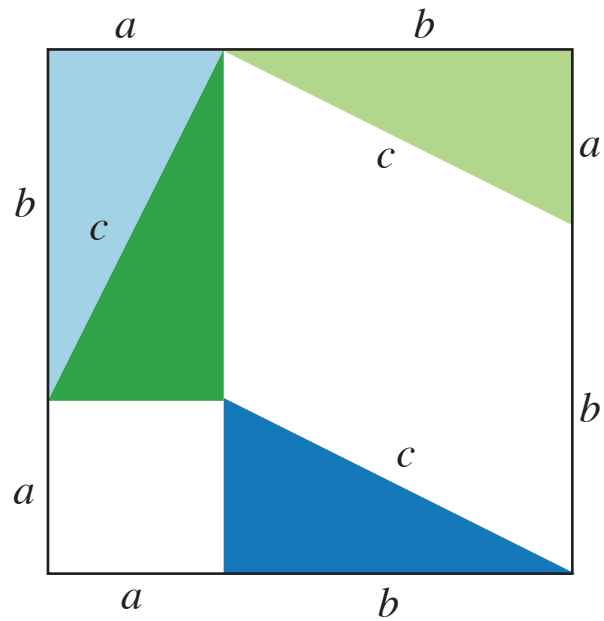
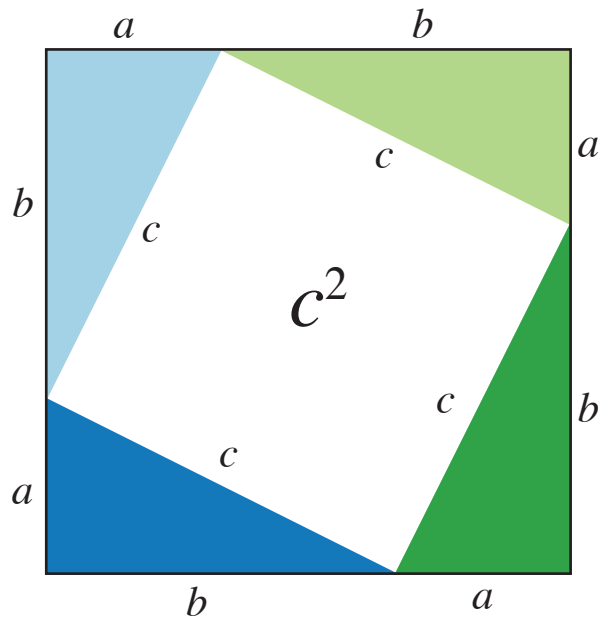


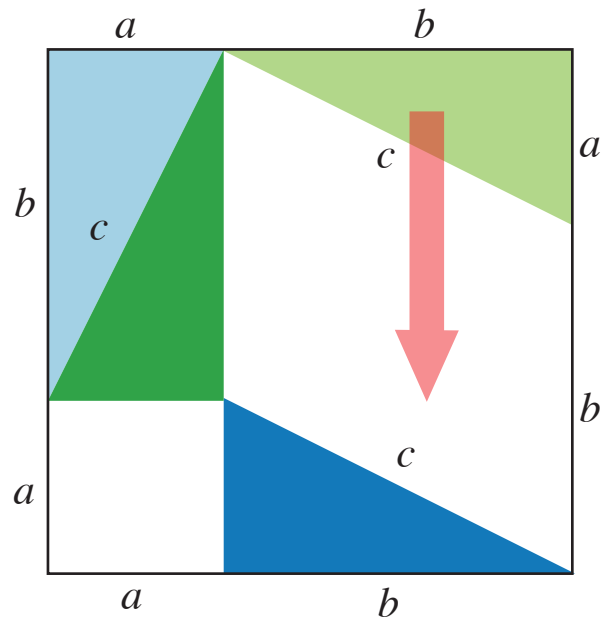
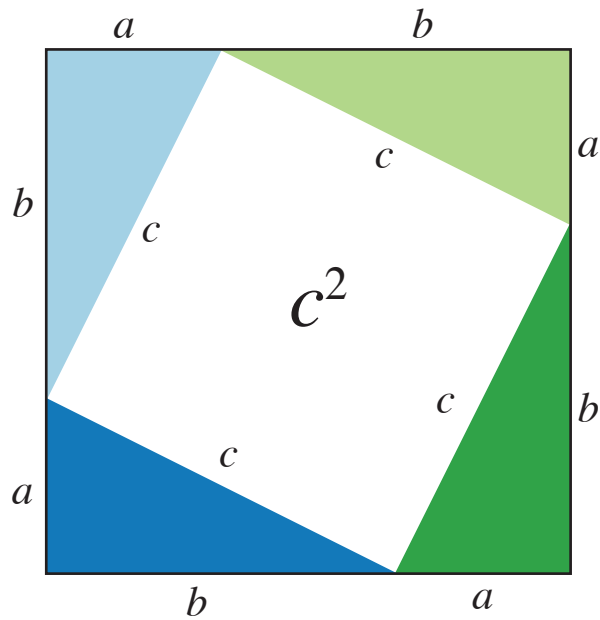


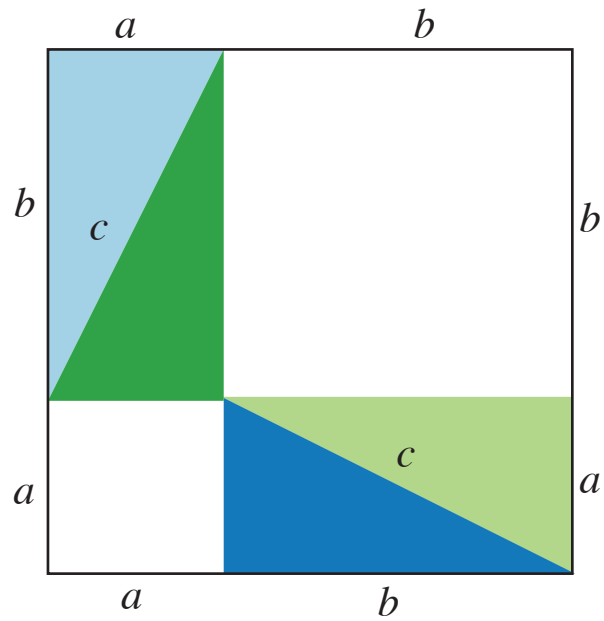
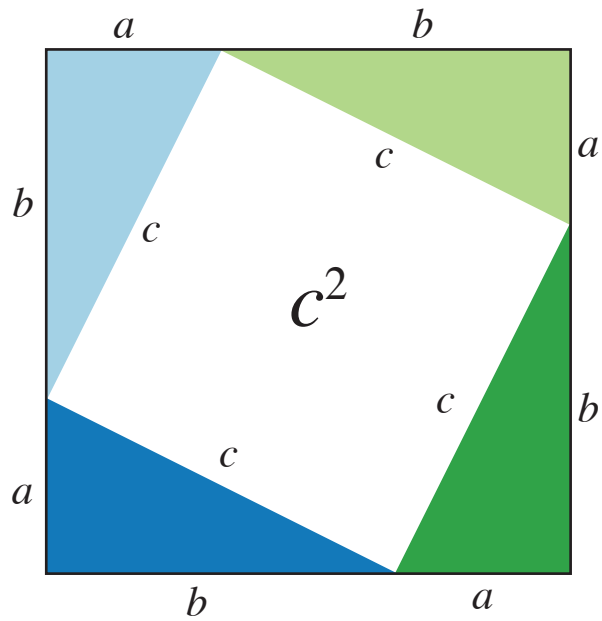




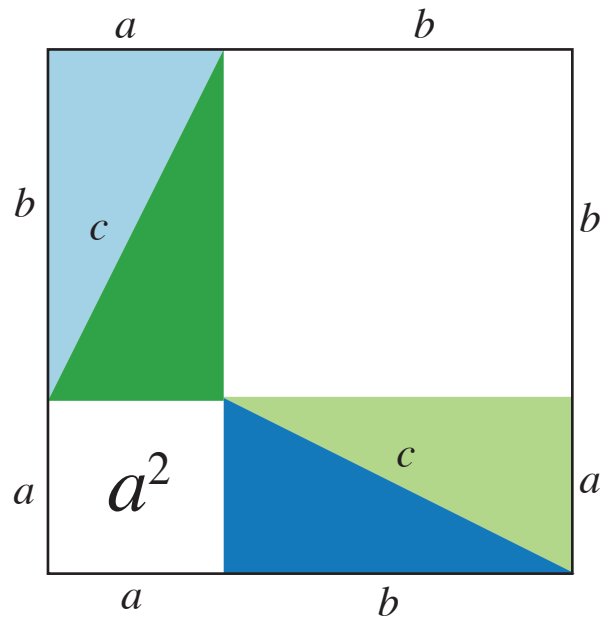
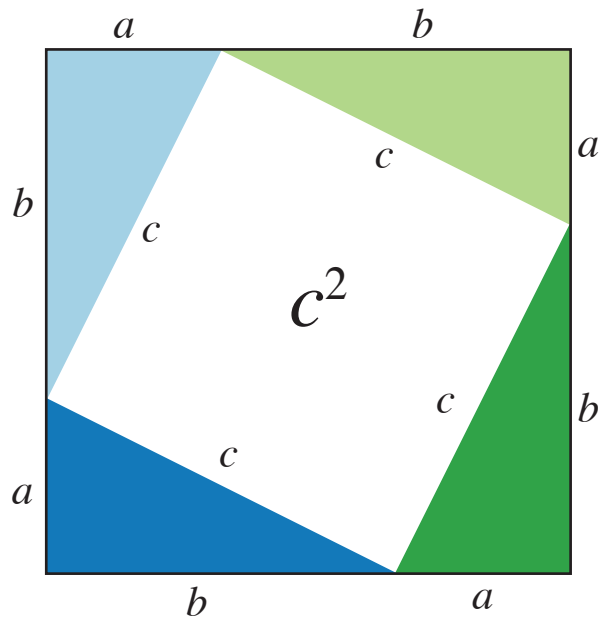


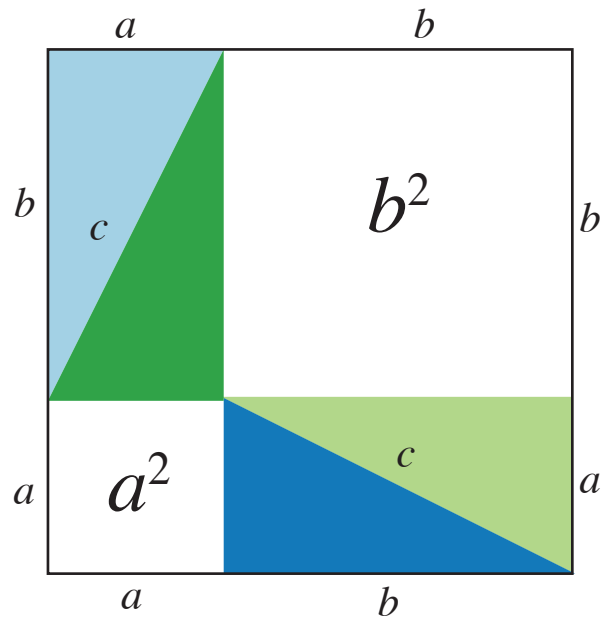
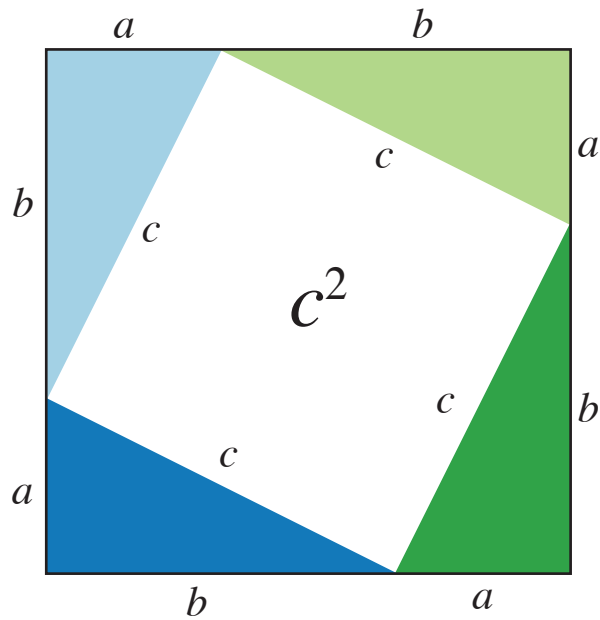




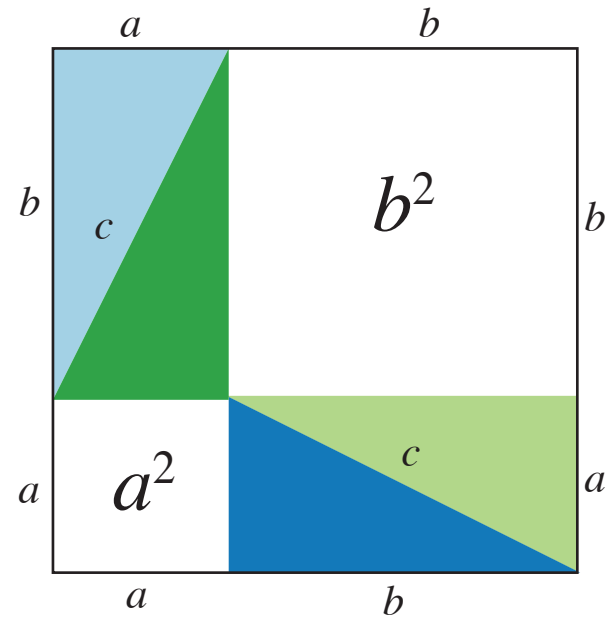
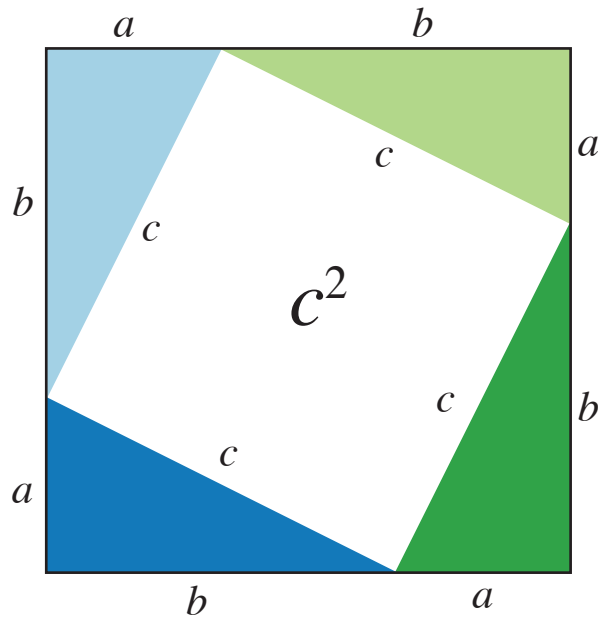








$$a^2 + b^2 = c^2$$







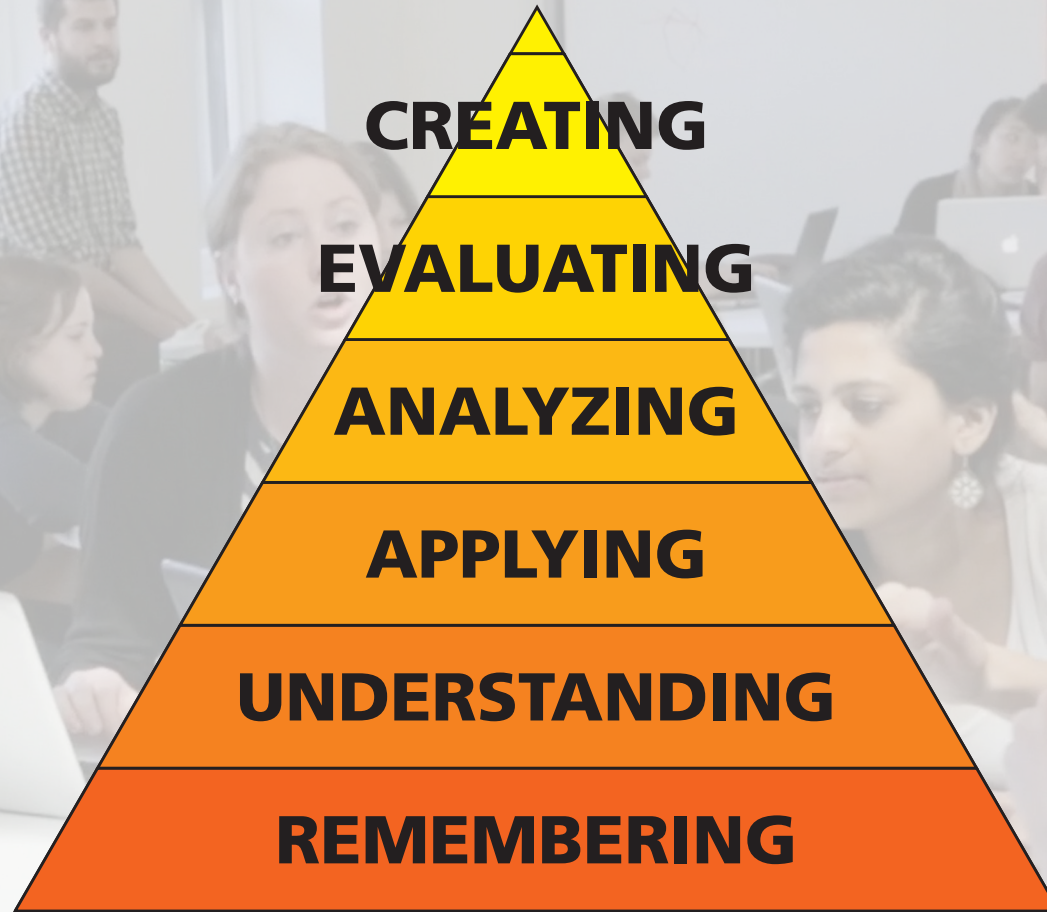
**six questions culled from various  
lesson plans on the Pythagorean theorem**



**task: classify them using Bloom's taxonomy**

**1** context

**2** classify



**1** context

**2** classify



use this link to see, classify, and rank the six questions

[http://bit.ly/qw\\_rank](http://bit.ly/qw_rank)



**1** context

**2** classify



**task: improve each of the six questions**

**1** context

**2** classify

**3** improve



working in groups, improve the questions  
so they score higher on Bloom's taxonomy

[http://bit.ly/qw\\_improve](http://bit.ly/qw_improve)



**1** context

**2** classify

**3** improve

here is a copy of my analysis

[http://bit.ly/qw\\_analysis](http://bit.ly/qw_analysis)



**1** context

**2** classify

**3** improve

A group of students are in a classroom or computer lab. In the foreground, a woman with blonde hair is speaking, looking towards the right. Next to her, a woman with dark hair is looking at a laptop screen. The laptop screen shows a website with the title "learning catalysis" and a bar chart. Other students are visible in the background, some working on laptops. The text "what are *your* questions testing?" is overlaid in the center of the image.

what are *your* questions testing?



summary of links from this workshop

[http://bit.ly/qw\\_links](http://bit.ly/qw_links)



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**mazur.harvard.edu**

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