

Designing questions for student-centered learning: Part 1



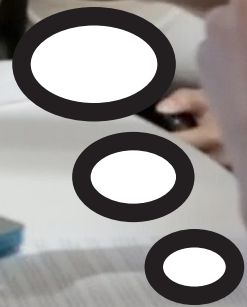
Professional Development Day
Episcopal Academy
Newtown Square, PA, 24 March 2023



Designing questions for student-centered learning: Part 1



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A group of students in a classroom or computer lab, working on laptops and discussing a program. The scene is brightly lit with large windows in the background. Several students are seated at desks with laptops, while others are standing and talking. The overall atmosphere is collaborative and focused.

program

1 context



program

1 context

2 classify



program

1 context

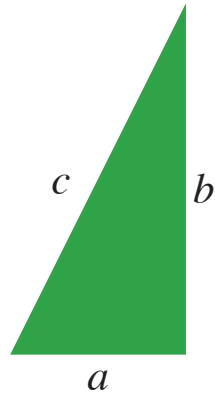
2 classify

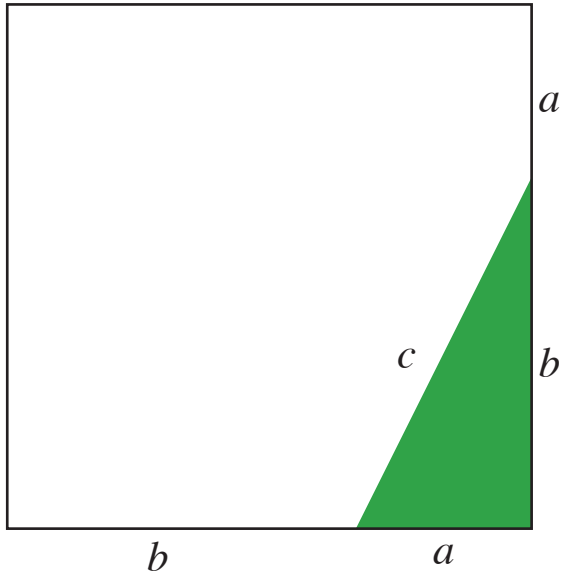
3 improve

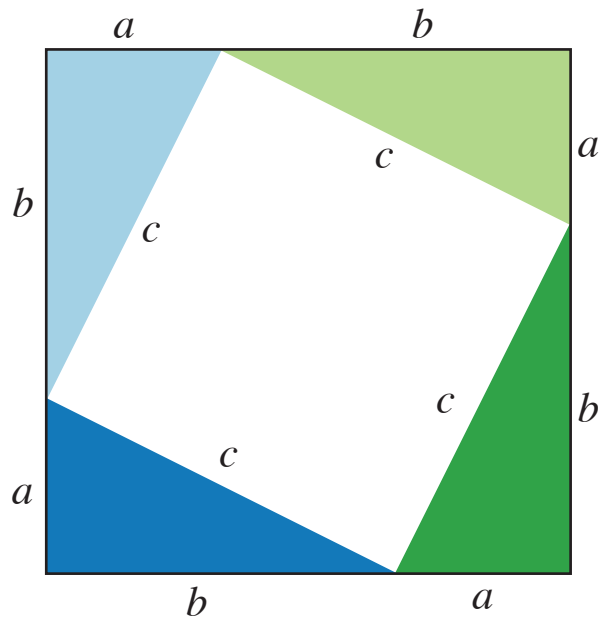
A group of students in a classroom or computer lab, with laptops open and text overlaid. The students are engaged in a discussion or collaborative work. The text "Pythagorean theorem" is overlaid in the center of the image.

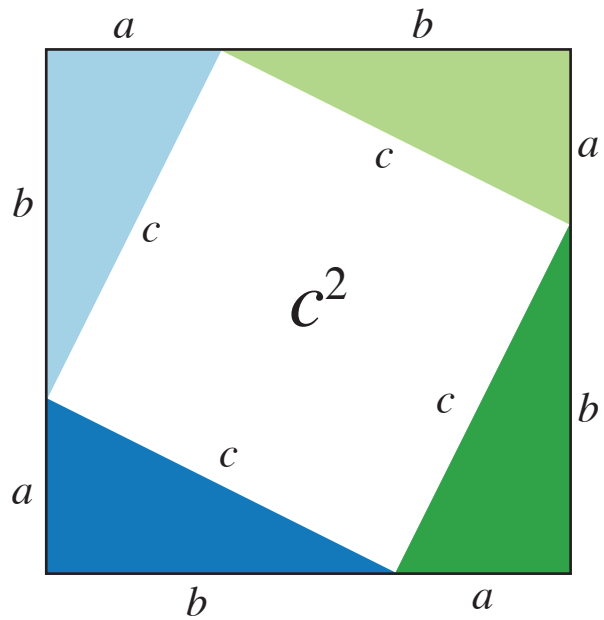
Pythagorean theorem

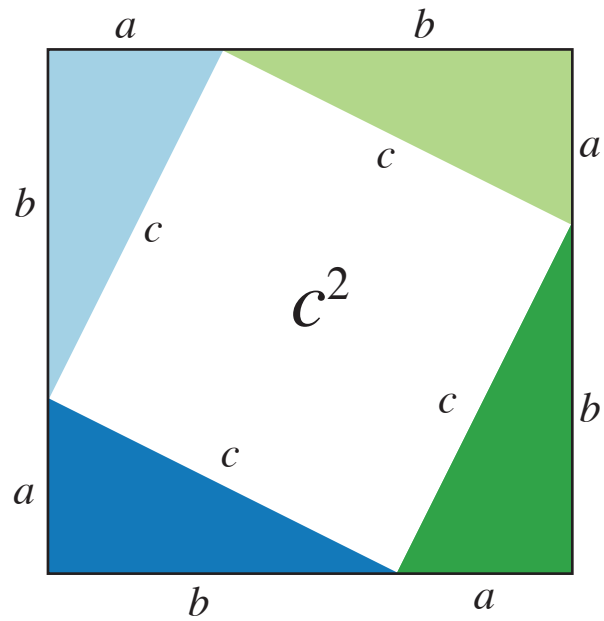
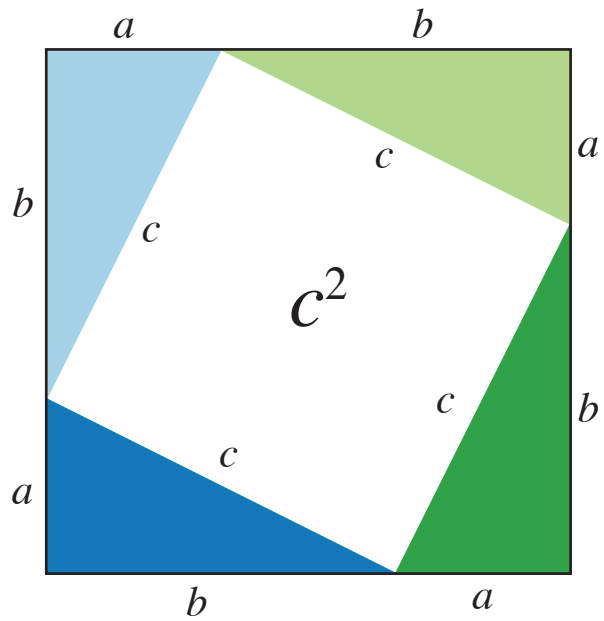
$$a^2 + b^2 = c^2$$

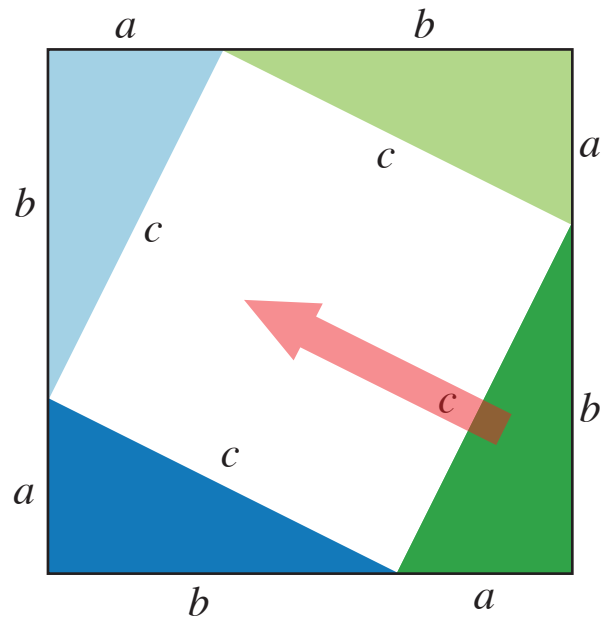
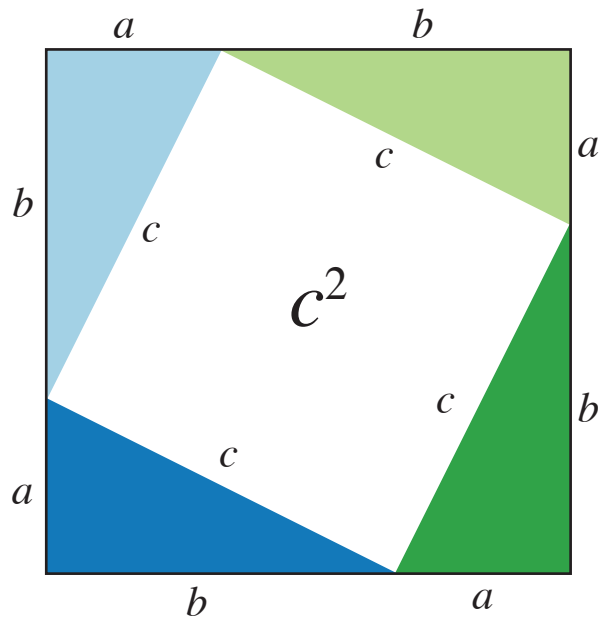


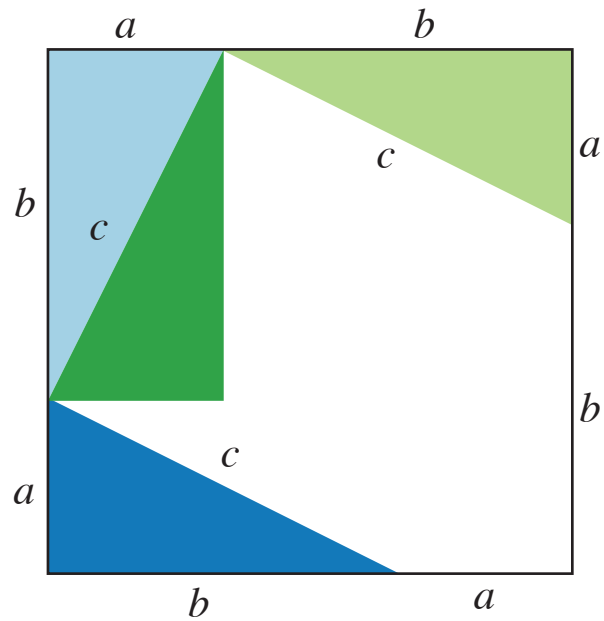
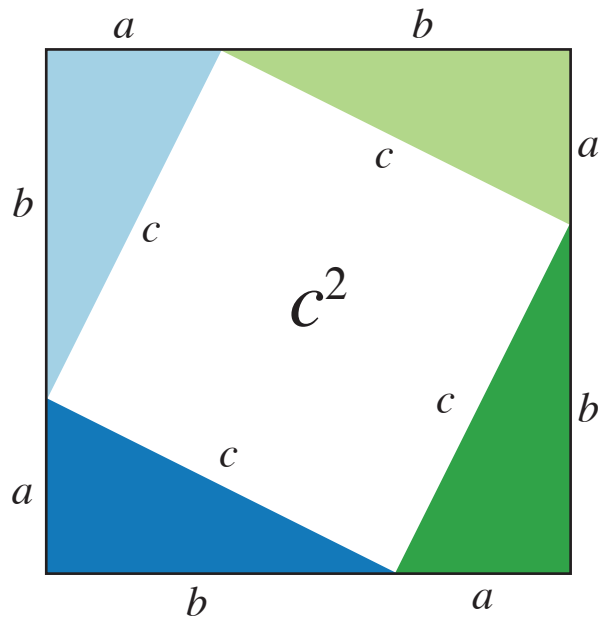


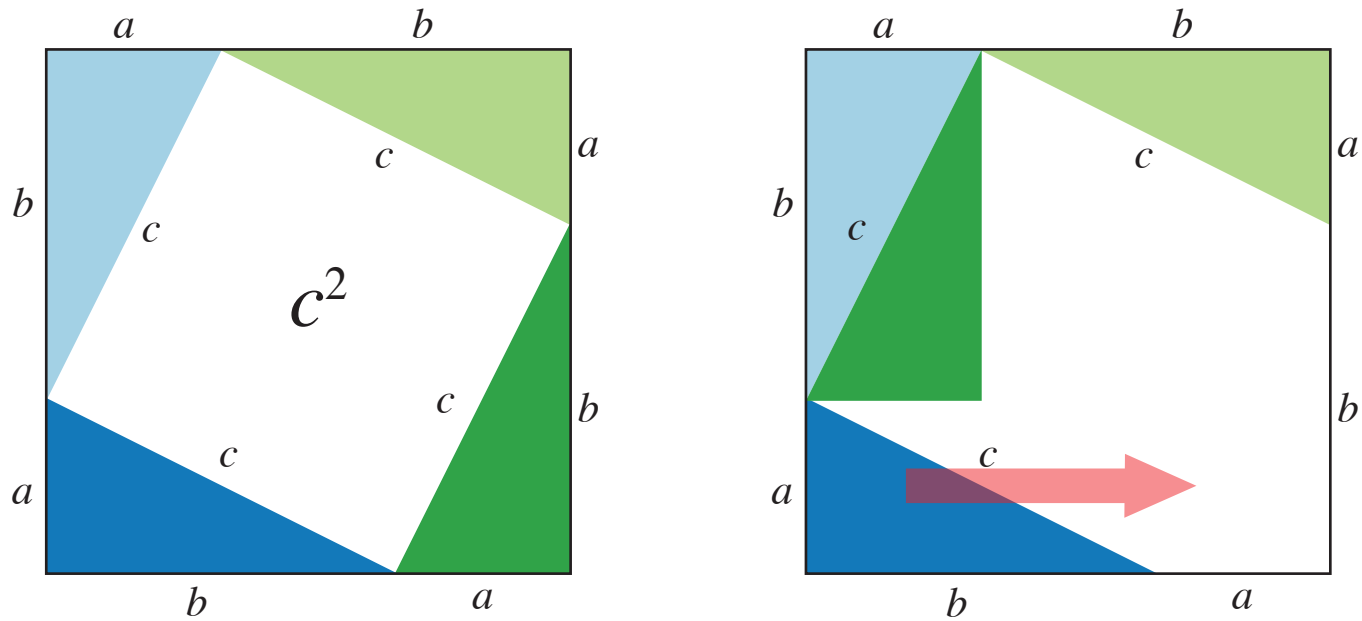


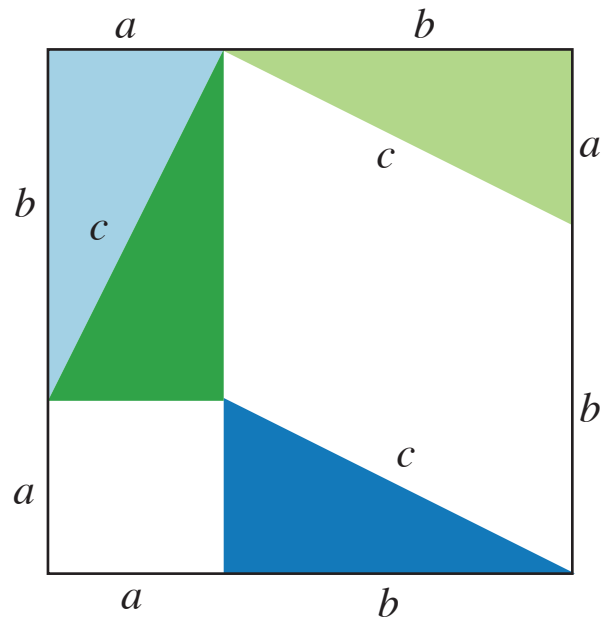
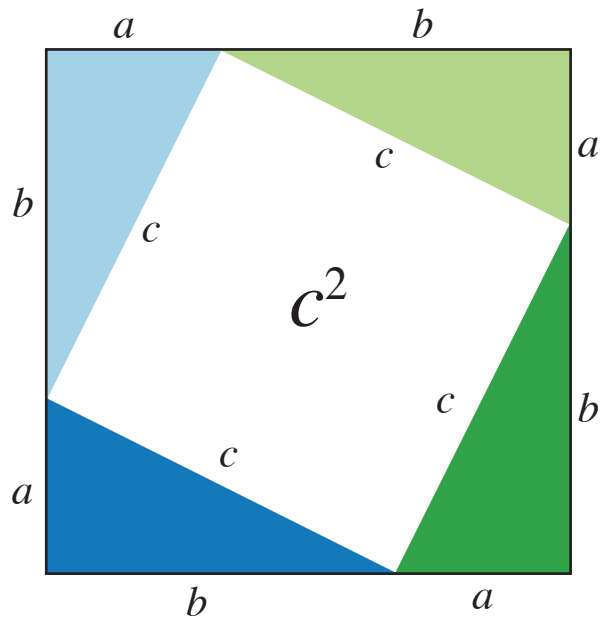


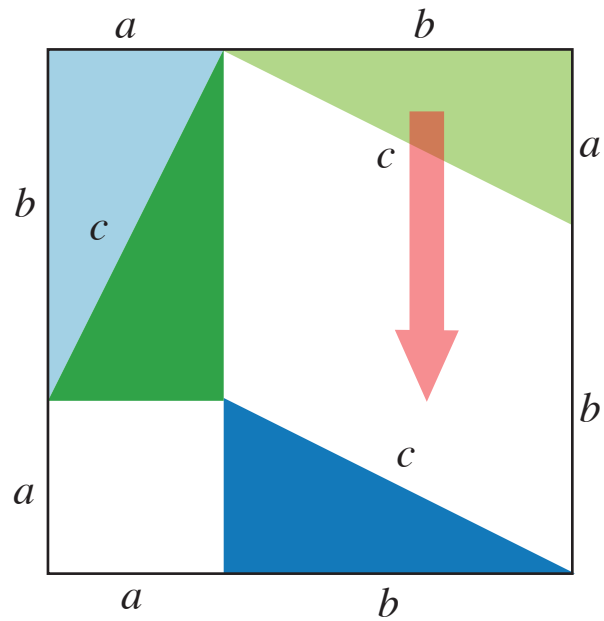
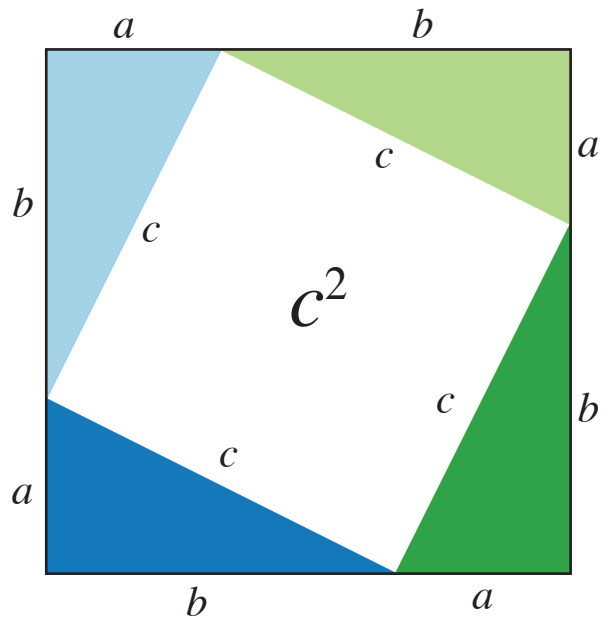


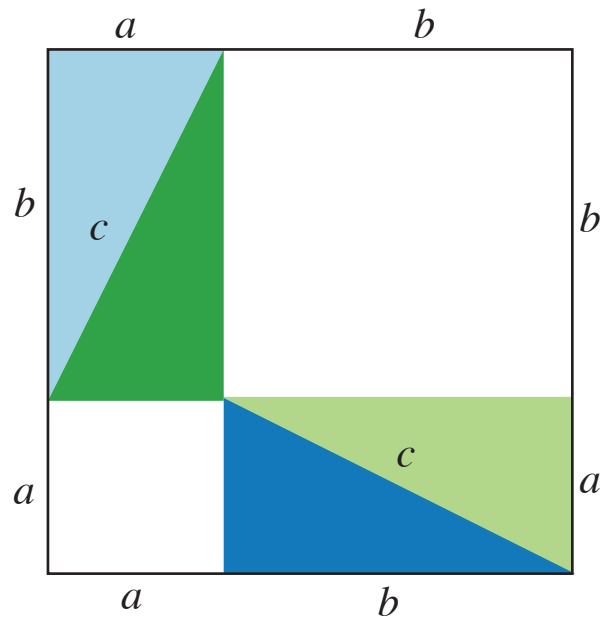
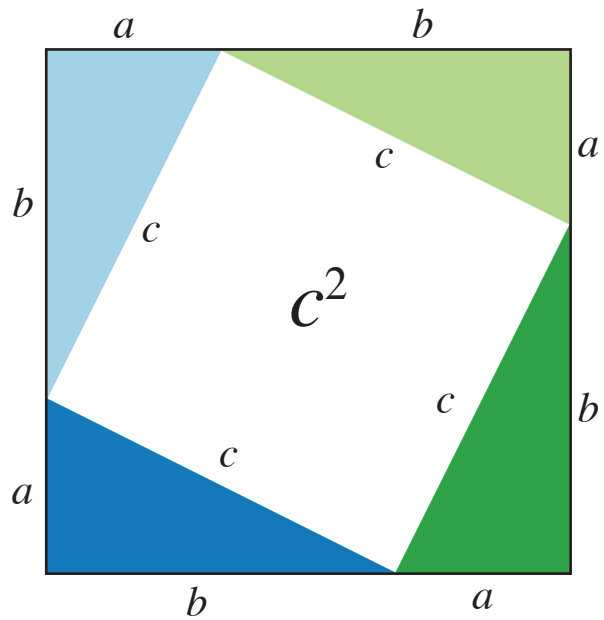


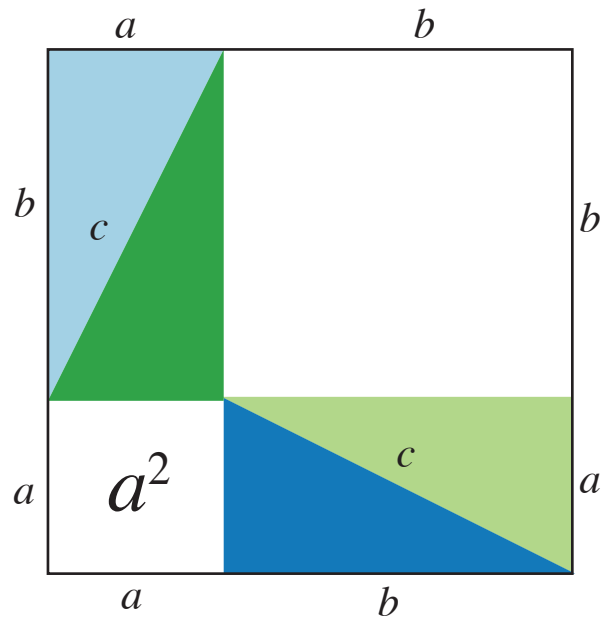
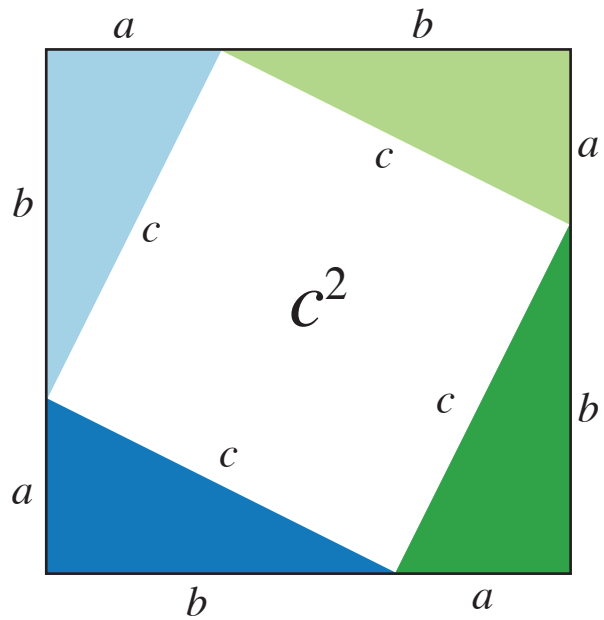


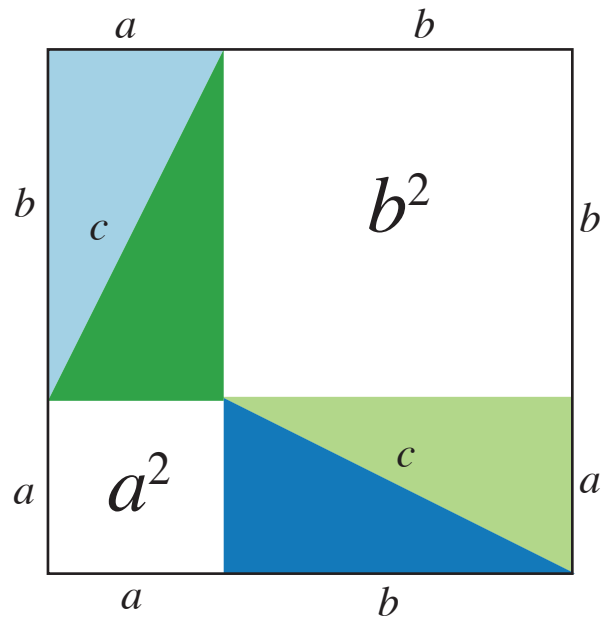
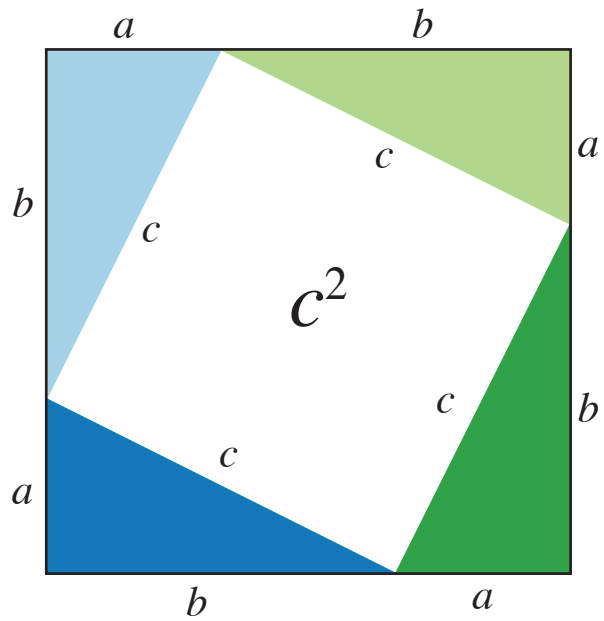




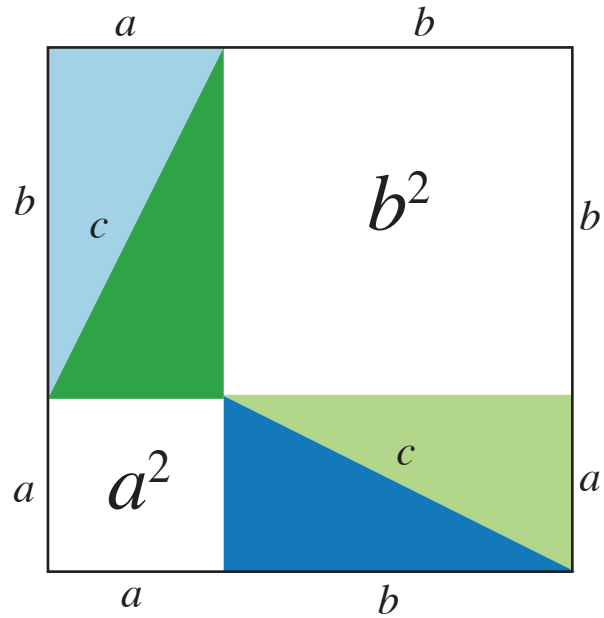
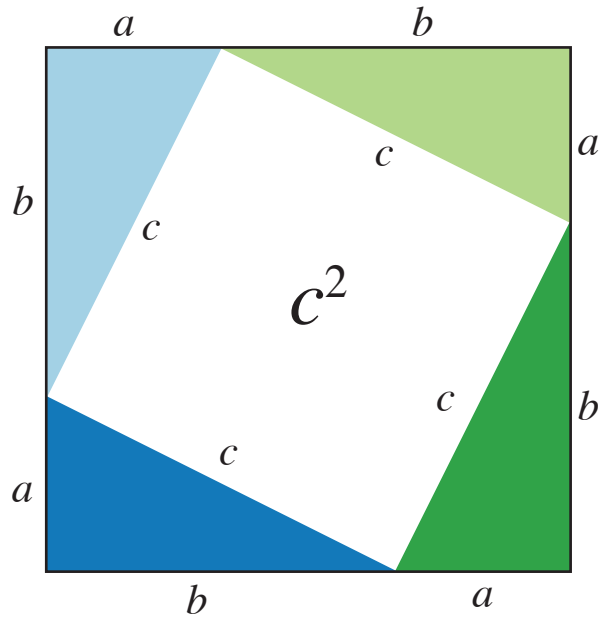








$$a^2 + b^2 = c^2$$





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

1

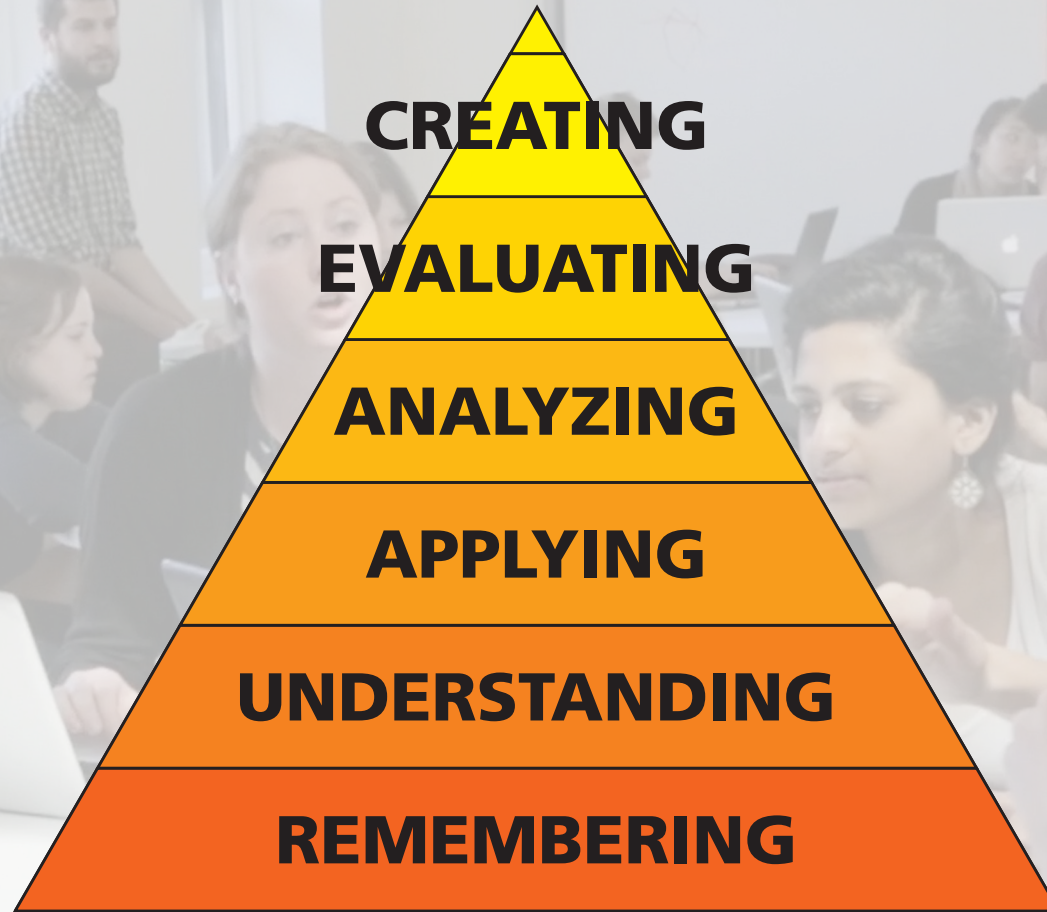
context



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



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



1 context

2 classify

3 improve

here is a copy of my analysis

http://bit.ly/qw_analysis



1 context

2 classify

3 improve



what are *your* questions testing?

summary of links from this workshop

http://bit.ly/qw_links



For a copy of these slides:

mazur.harvard.edu

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