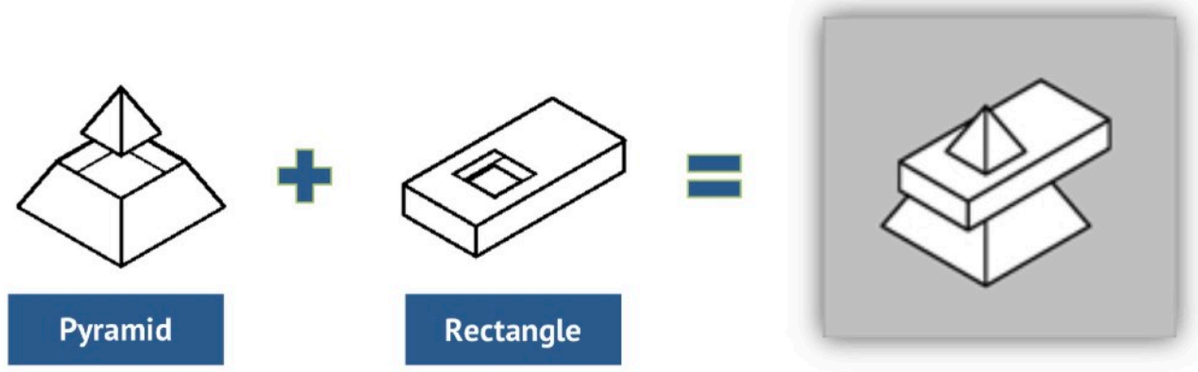
BASIC SHAPES WITHIN SHAPES

- Built from 2 or more basic shaped solids
- Solids are usually symmetric
- Positioning and proportionality are key

DEFINITION

A basic, usually symmetric, solid (a rectangular, triangular, circular, or other type of solid) that is embedded within another one of these basic shapes. Usually 1-2 problems per test.

HOWS' IT MADE? TRICKS?



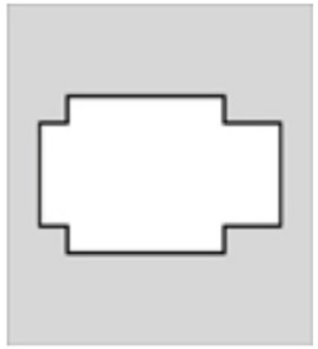
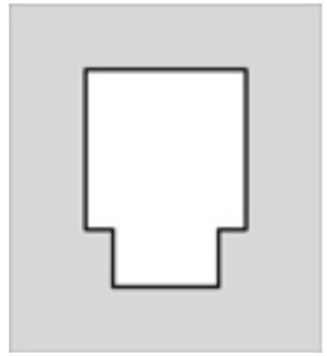
In this example, we have a very simple pyramidal base and a rectangular solid that are embedded into each other in a certain fashion. Imagine sliding the two solids together through those gaps above. Now, the question is, positionally and proportionally, how do these two pieces come together – that's the part that can and will deceive many:

BASIC SHAPES WITHIN SHAPES

Crack the DAT
YOUR PRESCRIPTION FOR SUCCESS

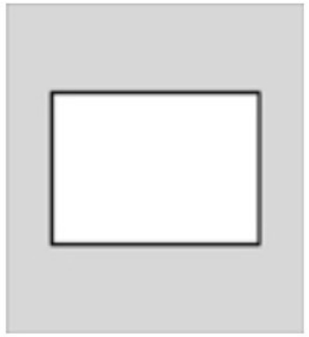
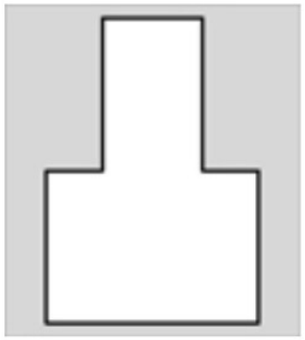
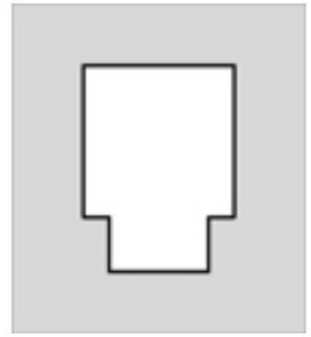
1. POSITION

Understanding where and how the basic shapes overlap relative to each other in each orthographic view. Let's look at an example with the TOP view:

		
EXPLANATION	**How far out is the shorter end of the rectangular solid (front, left side of 3D model) passing the base of the pyramid? This keyhole suggests that the shorter portion of the rectangle, travels past/ beyond the pyramidal base and forms the little extension off the left of the keyhole above.**	**This keyhole is the correct view. Everything is proportionally and positionally correct!**

2. PROPORTION

Understanding the shapes' proportionality's relative to one another. Let's look at an example with the TOP view:

			
EXPLANATION	**Is that rectangular base taking over the entire shape of this keyhole? You must develop an eye for proportions and, in this case, discern that the width of the pyramid's base is longer than the rectangle's.**	**Proportions are way off on this one. The pyramid's base should be a square (bottom area of keyhole is rectangular) and rectangular solid is too long (top of keyhole). Rest assured, once you go through test-mode once or twice, you'll be able to discern most, if not all, proportions!**	**This keyhole is the correct view. Everything is proportionally and positionally correct!**