## Surface Area - combined straight edge objects


(1) Recall the area formulas for a triangle and rectangle and find the areas of the ones displayed.Find the surface area of the square pyramid.

Determine the surface area of the triangular prism.

Identify the formulas for surface areas of the different shapes.

Figure out the surface area of the sculpture.
with lots of tips, answer keys, and detailed answer explanations for all of the problems.

The complete package, including all problems, hints, answers, and detailed answer explanations is available for all sofatutor.com subscribers.

## Recall the area formulas for a triangle and rectangle and find the areas of the ones displayed.

Assign the formula as well as the area to the given shape.

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## Hints for solving these problems

1 Recall the area formulas for a triangle and rectangle and find the areas of the ones displayed.

## Hint \#1

You get the values for each shape in the header. Just plug those values into the formula.

## Hint \#2

If you "cut" a rectangle along the diagonal into two, you get two triangles. Those triangles have the same area.

## Answers and detailed answer explanations for these problems

Recall the area formulas for a triangle and rectangle and find the areas of the ones displayed.

Answer key: A: 1, 4 // B: 2, 3

For the calculations of different areas we need a few formulas:
The formula for the area of a triangle is $A_{\text {triangle }}=\frac{1}{2}$ (base)(height).
So for the triangle given, the area is $A_{\text {triangle }}=\frac{1}{2}(45)(25.5)=573.75$.
The formula for the area of a rectangle is $A_{\text {rectangular }}=($ length $)($ width $)$.
So for the rectangle given, the area is $A_{\text {rectangular }}=(40)(12)=480$.

