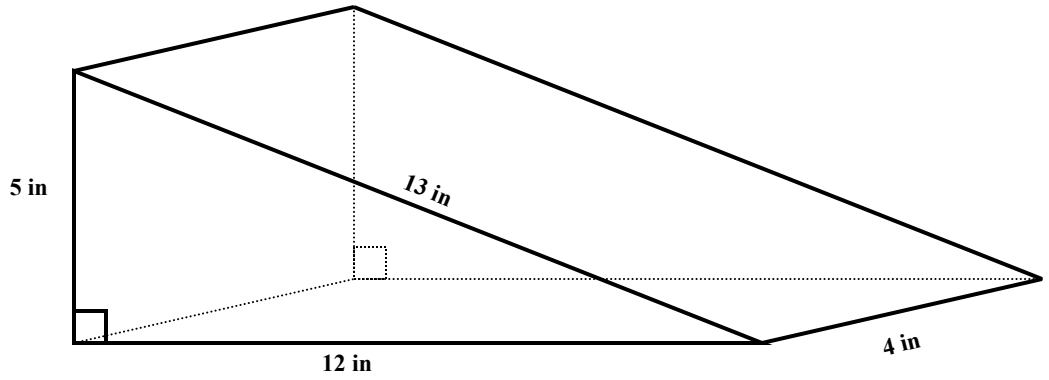
Using a net to find triangular prism surface area

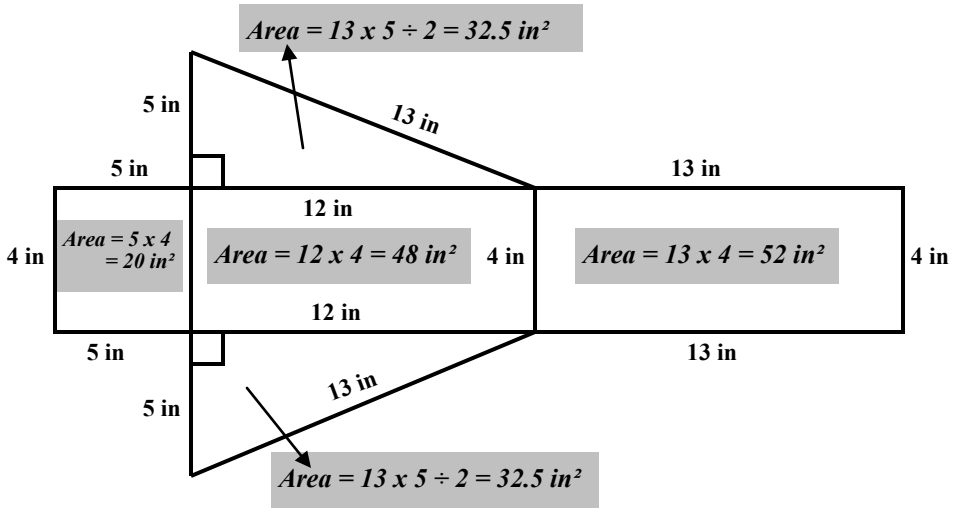
How to find the surface area of a triangular prism using a net

Second lesson is to help students to know how to find triangular prism surface area by drawing the net of the given prism.

Below is a given prism. We'll draw a net of this prism to calculate its surface area.



Below is the net of the above prism, along with the measurement of each edge. The net is made up of three rectangles and two triangles. Find the area of each rectangle and triangle individually, and then add all the areas to find the surface area of the given prism. (net is reduced to scale factor of 1/2)



Now add the areas of all the faces as calculated on the prism net; as shown below:

Surface area of the triangular prism = 32.5 + 48 + 32.5 + 20 + 52 = 185 in²

Hint: In finding the area of a triangle, you always given with a *square edge* in each triangular prism. To find the area of a triangular face, just multiply the sides making square edge and divide by 2.