box optimization worksheet

Group members:

Using the graph paper given to you, if you cut out a square from each corner and fold up the sides, you’ll get a box with no top. Without doing any calculations, try your best to decide how big to cut out the squares from the four corners to maximize your box’s volume. Take notes on your thinking for this process below:

Now create your box by cutting out the squares and then folding and taping the edges together. Using the squares of the graph paper, measure and record the dimensions of your box and then determine its volume. Write your names in the bottom of the box.

Length (in graph paper units):

Width (in graph paper units):

Height (in graph paper units):

Volume (Remember: V = l x w x h):