Space Diagonal for a Right rectangular prism

* Hey guys, my name is Christian and today on HOW TO MATH? (Title on screen), we are going to be learning about how to find the Space Diagonal of a Right rectangular prism.
* First! We learn the “What you need to know?”
* Now to find Space Diagonal of a right rectangular prism you need to use the formula the square root of l^2 +w^2+ h^2.
* Sounds hard but let’s break it down shall we?
* Before we try this formula out, make sure you have these things to follow along
* A piece of paper, a ruler, a calculator and 2 different colored writing utensil. Pause the video to get them to follow along.
* If you already watched the surface area for right rectangular prisms then you can use that example and can skip these next few parts of the video.
* First, we will want to draw rectangle with our ruler and get it nice and neat.
* Then we will want to draw 3d lines to show that the object is 3 dimensions.
* Now we are now going to give the dimensions some size and names. Let’s make height 2, width 4 and length 8.
* After that, multiply height^2, or two times 2, which will get us 4.
* Next is width^2, or 4 times 4 here, which gets us 16
* Then we do the same with length. 8 x 8 = 64.
* Finally we add them all together, which is 84, and square root it.
* Use your calculator like this. (Show how to square root a number) and you should end up with about 9.17.
* Now try this one on your own. Pause the video to answer.
* Here is the answer to that one. Congrats if it was correct.
* And that is today’s HOW TO MATH? Video. I hope you learned, the next video will be all about finding the area of a right triangle and until next time, smile daily.