Area Investigation

Complete the following table using the applet in the online course, or by performing the calculations for area on your own.

In this investigation, follow these steps to complete the table below.

1. Use the sliders to choose a length and width for a rectangle.
2. Click in the box to reveal the area.
3. Record the area in the table.
4. Click the box to double one of the dimensions.
5. Record the new dimension and the new area in the table.

*Note: if the applet does not work, you will need to calculate the area with a calculator.

Fill in the following table

Rectangle #	length and width	area of rectangle	new dimensions when one dimension is doubled	area of rectangle when 1 dimension is doubled	How many times bigger is the area when one dimension is doubled?
example	4 x 2	8	4 x 4	16	2
1	x				
2	x				
3	x				
4	x				

Question:
What happens to the rectangle's area when one dimension is doubled?

What do you think will happen if you double both dimensions? Will a similar pattern emerge? Use the applet to explore doubling both dimensions.