Problem Solving

Arthur is building a scale model of a rock formation and medieval tower for his social studies class. He is deciding whether to build a model that is 0.1 times as small or 0.01 times as small as the real formation and tower. Help him decide by calculating the measurements for each feature and answering the questions.

1. What patterns do you see in the table? Why do you think this happens?

2. Arthur's rectangular display board has a length of 0.8 meters and width of 0.75 meters. What is the area of the display board?

3. Which scale model do you recommend Arthur build? Why?

Feature	Actual Measurements (meters)	Scale Model Measurements (meters)	
		0.1 Times as Small	0.01 Times as Small
Rock formation height	41.5		
Tower length	2.7		
Tower width	3.6		
Tower height	19.8		