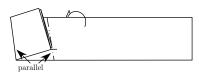
The Miura Map Fold

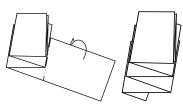
This fold was invented by the Japanese astrophysicist Koryo Miura as a method for deploying large solar panel arrays on space satellites. It's also been used to easily fold and unfold maps.



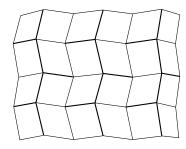
(1) Take a rectangle of paper and mountain-valley-mountain fold it into 1/4ths lengthwise.



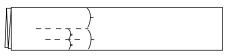
(4) Fold the remainder of the strip behind, making the crease parallel to the previous crease.



(6) Repeat this process until the strip is all used up. Then **unfold** everything.



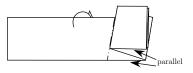
In the end the paper should fold up neatly as shown to the left. You can then pull apart two opposite corners to easily open and close the model.



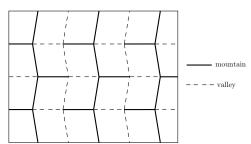
(2) Make 1/2 and 1/4 pinch marks on the side (one layer only) as shown.



(3) Folding all layers, bring the lower left corner to the 1/4 line, as in the picture.



(5) Repeat, but this time use the fold from step (3) as a guide.



(7) Now re-collapse the model, but change some of the mountains and valleys. Note how the zigzag creases alternate from all-mountain to all-valley. Use these as a guide as you collapse it...

