

Origami techniques

Diagrams © 2016 Stephen Hill

Folding a square into thirds There are several ways of doing this, many of which involve using reference lines to mathematically mark out the one-third divisions.

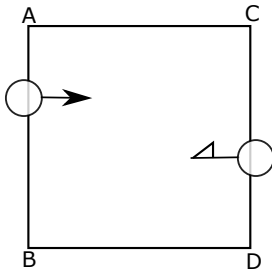
There are two essential problems with this approach.

1) It will add additional reference lines to the paper which will complicate the folding process of this model, something which is especially significant given that it already includes 68 pre-creases. If you're using this approach, I'd recommend that you create a template first and use that to divide the paper into thirds.

2) I'm not actually very good at point-to-point folding.

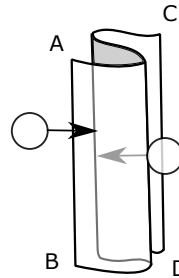
The method that I shall be covering here is a variation of the successive approximation method which I taught myself a few years ago when I was trying to learn how to fold a particularly cool box. I've forgotten about the box completely but the folding technique is now hard-coded into my muscle memory, and it's come in very handy.

1



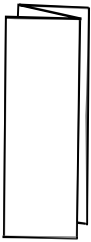
Hold the two sides A-B and C-D in both hands and gently curl the edges outwards and towards the centre, twisting the paper to produce a crude 'S' shape. The paper should become three dimensional.

2



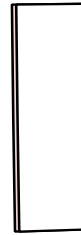
Gradually adjust the two sides until the edges start to line up.

3



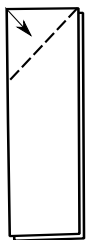
Compress the 'S' shape into a 'Z' continuously adjusting the edges until they line up perfectly.

4



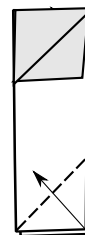
Once you're happy that edges are positioned correctly, fold the paper flat, making sharp creases on the sides.

5



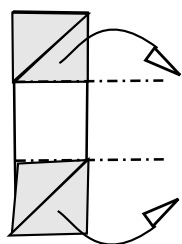
Fold the left-hand edge of the paper diagonally so that it touches the side

6



Fold the right-hand edge diagonally so that it touches the side.

7



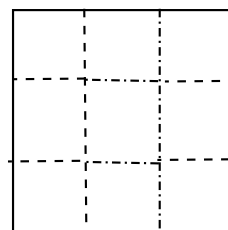
The flaps now divide the paper into vertical thirds. Fold all three layers down to create strong mountain folds at the points shown.

8



The model should look like this (but slightly neater). Unfold.

9



Convert the valley folds to mountain folds.

You have now divided the paper into thirds.