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# Reindeer



Developed in Dec '03 by Ching-Yu Hung. Adapted from Alice Blumberg's Antelop (pp 86-88, Complete Origami by Eric Kenneway)

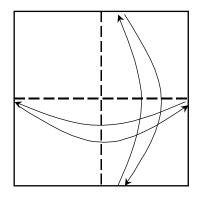
This is really Kirikomi, which uses cutting as essential part of the design.

Start with a square piece of paper. If you already know bird base, do that and go straight to step 7.

The side of paper you want on the inside should face up.

#### 1

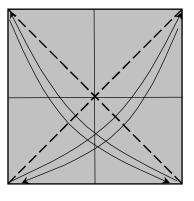
Fold in half way horizontally, fold back, then hold in half way vertically, fold back.



# 2

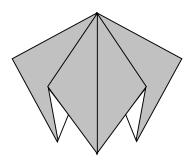
Flip the paper over (so the out-side of paper faces up).

Fold in half way diagonally and fold back. Repeat for the other diagonal.



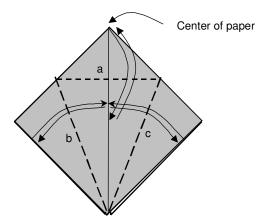
# 3

Reinforce the creases and gather up the 4 corners. Shape it into a diamond. The colored side should be out. This is called the preliminary-fold base.



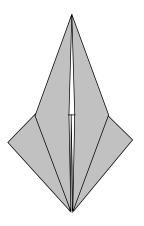
# 4

Make creases as shown.



# 5

Open up the front diamond, reinforce crease line a on the top layer, and fold in the top layer by reversing crease lines b and c. After this, the design should look like:

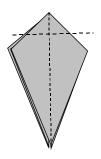


#### 6

Flip it over and repeat #4 and #5. This is the so-called bird base.

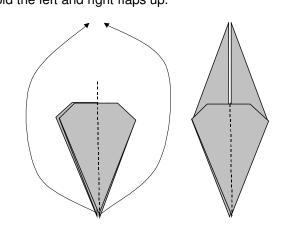
# 7

Fold down the upper flaps (top layer and bottom layer). Make a crease line as shown, then "sink" the top triangle. You will need to open the paper all the way up, make crease lines (there're 4 after you open up) mountain folds, reverse the fold for the X inside the 4 mountain folds, then put back the birdbase with the center of the paper sunk inside.



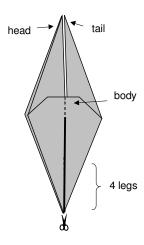


**8** Fold the left and right flaps up.



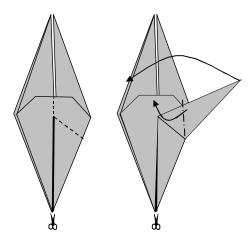
# 9

Make cuts in both top and bottom layer of the lower half of the design. Identify parts of the deer.



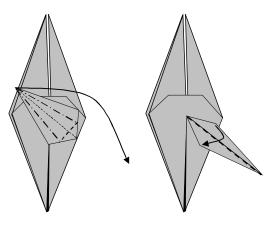
#### 10

Make the valley fold on one leg, as shown, then open and flatten it (squash-fold).



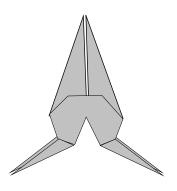
### 11

Make the mountain and valley creases as shown, open up the leg-flap, enforce the creases, and sharpen/flatten the leg. This is called petal fold.



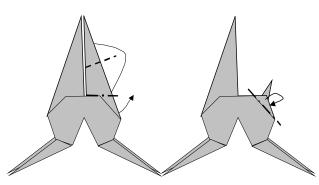
# 12

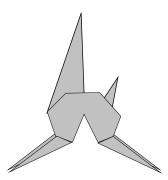
Repeat #10 and #11 on the three other legs. Eventually you should see.



# 13

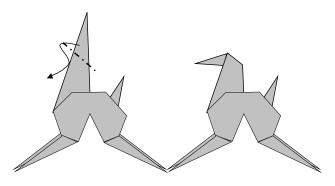
Fold the tail with the successive inside reverse folds. Then, tuck in the extra flaps on the hips.





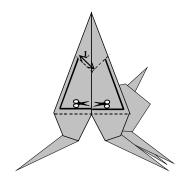
# 14

Do an inside reverse fold to form the head.



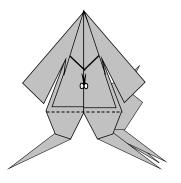
# 15

Open up the front of the deer. Cut carefully along the lines shown **on the top layer**. Note the length of the uncut section of the neck/head fold line, L. The two cutout flaps will form the antlers.



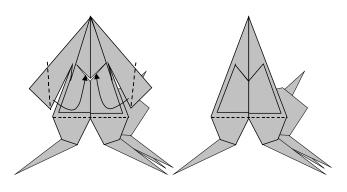
# 16

Open up the antler flaps. Cut along the V-shape head/neck fold line as deep as L. You should pinch the whole top piece back along center line, so you can cut both segment of the V at the same time. Be careful not to cut too deep, or the deer head will disconnect.



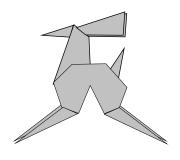
# 17

Temporarily fold the antler flaps to make them narrower. Thread each into the V cut to the other side. Be careful not to tear out the head.



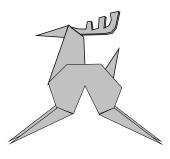
# 18

Restore the head/neck fold. The antlers should be where they're supposed to be.



# 18

Cut the details of the antlers. Hold both antler pieces tight and cut them together. You can use your own design. This is what I do.



Done!