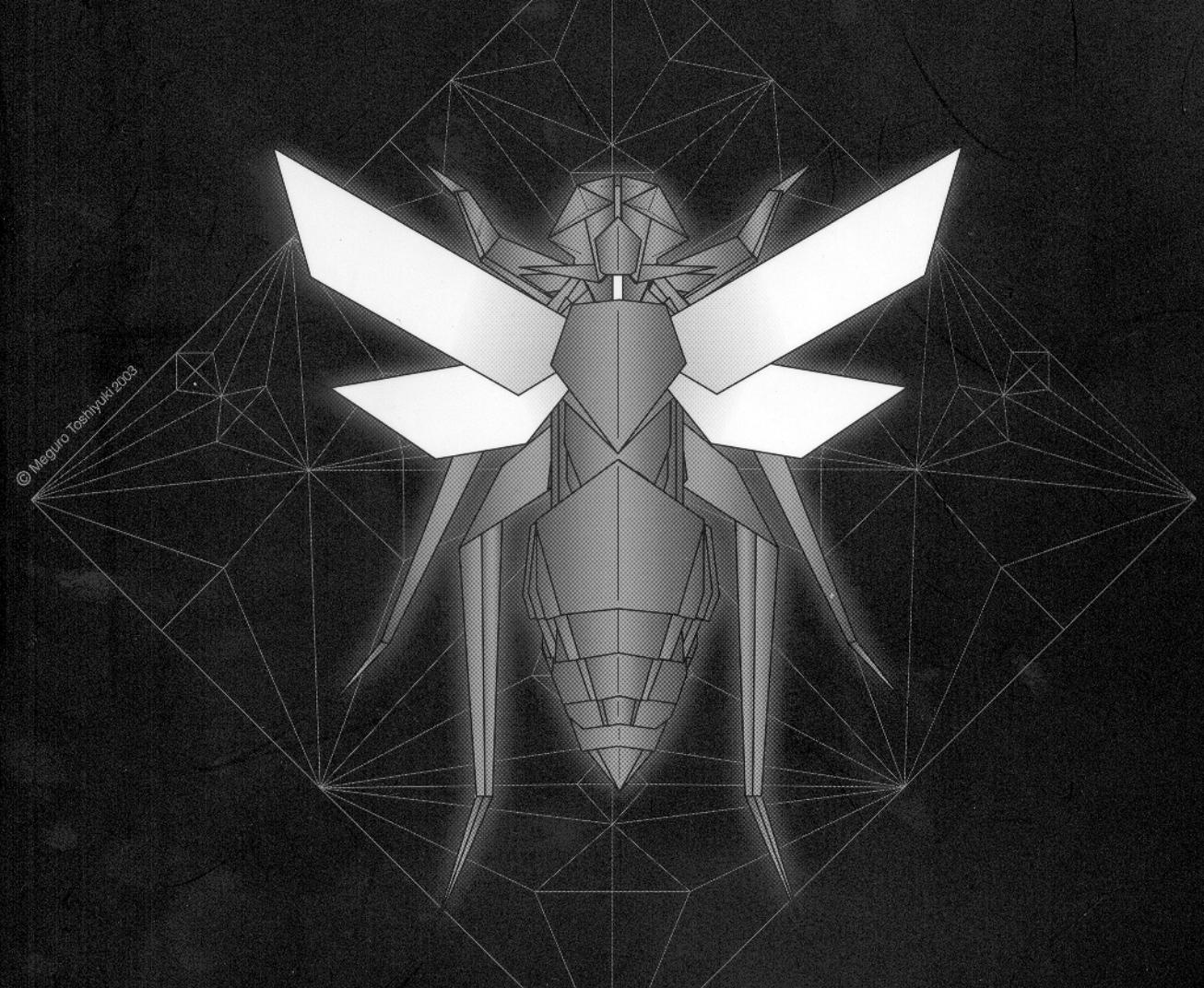


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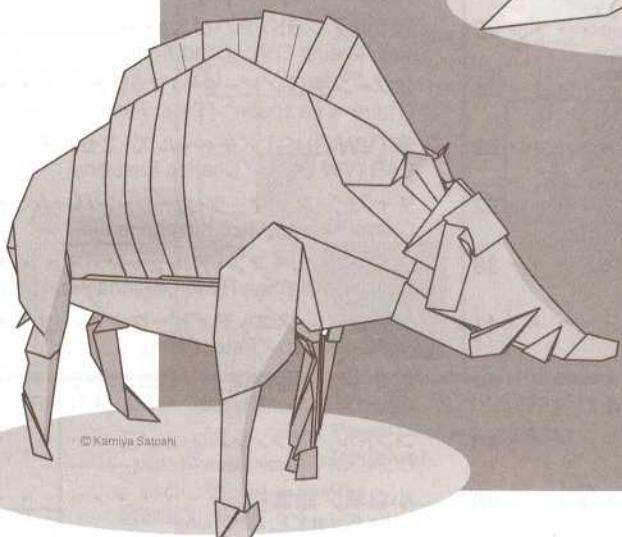
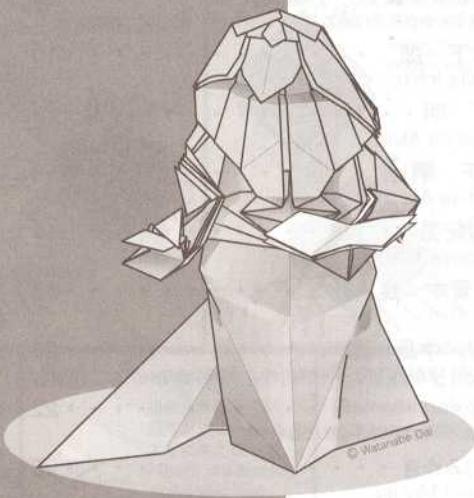
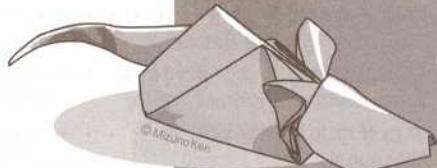
折り図集

Vol.9

発行・日本折紙学会

ORIGAMI TANTEIDAN 9th CONVENTION

第9回
折紙探偵団
コンベンション



折り図集

Vol.9

発行・日本折紙学会

CONTENTS

折り図記号 ······	3
Symbols for Folding	
基本形・沈め折り ······	4
Preliminary Bases and Sink	

マンタ／川畠文昭 ······	74
Manta ray／Kawahata Fumiaki	

ラッコ／宮島 登 ······	80
Sea Otter／Miyajima Noboru	

鳳凰／山口智之 ······	87
Phoenix／Yamaguchi Tomoyuki	

ケルベロス／福山研太郎 ······	94
Cerberus／Fukuyama Kentarou	

北風の生まれ変わり／宮本真太郎 ······	99
THE NORTH WIND／Miyamoto Shintaro	

黄色い鳥／神谷哲史 ······	106
The Yellow Bird／Kamiya Satoshi	

猪神／神谷哲史 ······	112
Boar God／Kamiya Satoshi	

ティラノサウルス／木村哲夫 ······	125
Tyrannosaurus／Kimura Tetsuo	

アロサウルス／高井弘明 ······	129
Allosaurus／Takai Hiroaki	

アシナガバチ／目黒俊幸 ······	137
Long Legged Wasp／Meguro Toshiyuki	

掌の中の小鳥／渡辺 大 ······	159
A Bird on Hand／Watanabe Dai	

国内編：Models by Japanese Folders

一枚折り手裏剣の研究／笛出晋司 ······	6
One sheet throwing knife "shuriken"／Sasade Shinji	

表裏同等一枚折り手裏剣／小松英夫他 ······	8
One sheet inside-out isomorphic throwing knife "shuriken"／Komatsu Hideo, et. al.	

デジタル／木下一郎 ······	10
Digital／Kinoshita Ichiro	

銀河／山下 明 ······	12
Galaxy／Yamashita Akira	

アデュー／山下 明 ······	13
Adieu／Yamashita Akira	

メーヴェ／黒川紀男 ······	14
Moewe／Kurokawa Toshio	

スターシップ／青木 良 ······	18
StarShip／Aoki Ryo	

2枚組み花飾り／中島 進 ······	20
Flower Ornament (2pieces)／Nakajima Susumu	

桜／田中稔憲 ······	22
Cherry Blossom／Tanaka Toshinori	

ホイップ／川村みゆき ······	25
Whip／Kawamura Miyuki	

ウェッジ／川村みゆき ······	26
Wedge／Kawamura Miyuki	

クリスタル・スプラッシュ／川村みゆき ······	29
Crystal Splash／Kawamura Miyuki	

1/3のおび／山田勝久 ······	32
1/3 Strap／Yamada Katsuhisa	

7角形の壘紙／霞 誠志 ······	36
Heptagonal Tato／Kasumi Seishi	

リス／中川幸治 ······	41
Squirrel／Nakagawa Kouji	

ねずみ／水野 健 ······	44
Mouse／Mizuno Ken	

犬（マック）／前川 淳 ······	46
Doggie whose name is Mac／Maekawa Jun	

クマ／西川誠司 ······	48
Bear／Nishikawa Seiji	

日本猿／前川 淳 ······	54
Japanese macaque／Maekawa Jun	

オランウータン／磯村 浩 ······	55
Orangutan／Isomura Hiroshi	

スプリングボック／本田 弦 ······	58
Springbuck／Honda Gen	

ペリカン／芦村俊一 ······	67
Pelican／Ashimura Shun'ichi	

アフリカツメガエル／北條高史 ······	72
Xenopus borealis／Hojo Takashi	

海外編：Models by Foreign Folders

孔雀のポップアップカード／ジェレミー・シェーファー ······	170
Peacock Pop-up Card／Jeremy Shafer	

歌舞魚／ジラド・アハロニ ······	174
The Singing Fish／Gilad Aharoni	

スプーン曲げ／ピーター・ファリナ ······	176
"There is no spoon"／Peter Farina	

車(VW-BUG)／チャールズ・エセルティーン ······	178
CAR (VW BUG)／Charles Esseltine	

チェスピース／マーク・カーシエンバーム ······	183
ChessPieces／Marc Kirschenbaum	

人魚／ウィリーマン・アルゼート ······	197
Sirena／Willyman Reed Cardona Alzate	

ゴールデン・スニッチ／ピーターファリナ ······	203
Golden Snitch／Peter Farina	

杖を持つ幽霊修道士／ニコラス・テリー ······	206
Ghost Monk with a stick／Nicolas TERRY	

コンドル／フランシスコ・ムノス ······	210
CONDOR／Francisco Munoz	

小白鷺／鍾富祥 ······	213
Little Egret／F. C. Chung	

カミキリムシ／マニュエル・シルゴ・アルバレス ······	218
Acantocino／Manuel Sirgo Alvarez	

蜂／マニュエル・シルゴ・アルバレス ······	224
Escolia／Manuel Sirgo Alvarez	

カメ／エラン・ライセロヴィツ ······	233
Turtle／Eran Leiserowitz	

キリン／ロナルド・コウ ······	237
Giraffe／Ronald Koh	

ライオン／ロバート・J・ラング ······	247
Lion／Robert J. Lang	

折り図記号

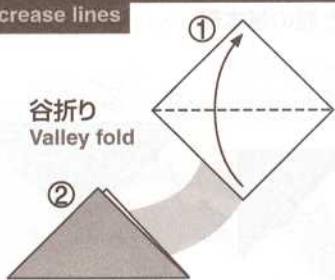
Symbols for Folding

折り線の種類 Types of crease lines

谷折り線 Valley fold



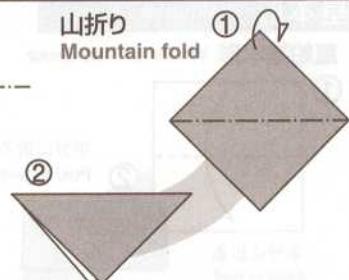
谷折り Valley fold



山折り線 Mountain fold

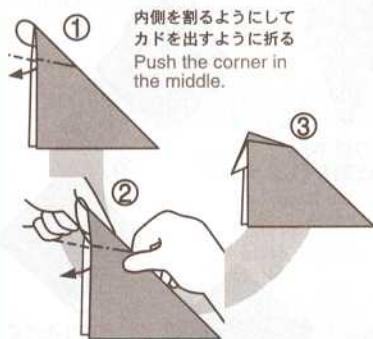


山折り Mountain fold



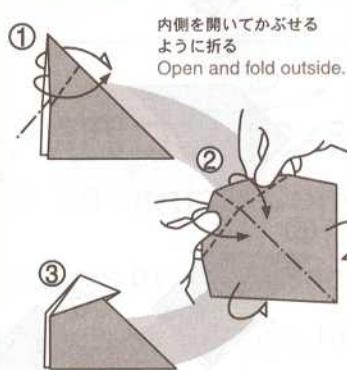
折り方の技法 Basic Folding Skills

中わり折り Inside-reverse fold



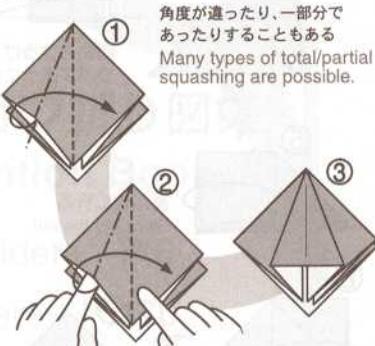
内側を割るようにして
カドを出すように折る
Push the corner in
the middle.

かぶせ折り Outside-reverse fold



内側を開いてかぶせる
ように折る
Open and fold outside.

内側をひろげてつぶすように折る Squash fold



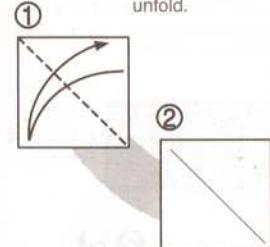
角度が違ったり、一部分で
あったりすることもある
Many types of total/partial
squashing are possible.

いろいろな記号 Symbols

折り筋をつける

Making a crease line

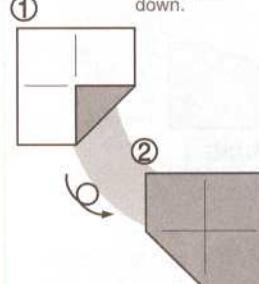
一度折ってから戻して
折り筋をつける
Fold and mark a
crease line, then
unfold.



裏返す Turn paper over

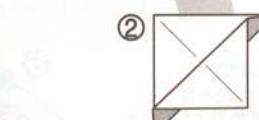
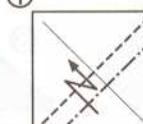


おりがみを裏返す
上下の位置は
変わらない
Don't rotate the
paper upside
down.



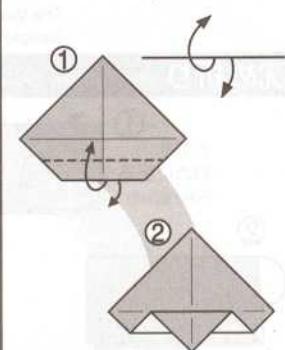
段折り Pleat fold

横から見ると
段になっている
ように見える
Pleats are formed
when you look
from the side



下の部分を出すように折る Release bottom flap when making a fold

一度折ってから戻して
折り筋をつける
Fold and mark a
crease line, then
unfold.



次の図が 大きくなる A magnified view



仮想線・透視線 A hidden line



押す・つぶす Push paper in



引き出す Pull out



ひろげる Open up



○と○を 合わせて折る Match circled points



巻くように折る Roll the flap by repeated folds

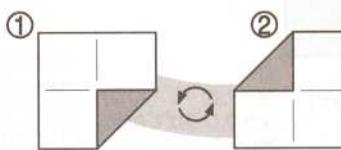


注意するところ Marked points

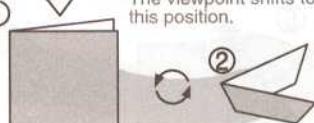


次の図の見る位置が変わる

Paper position changes (rotation)

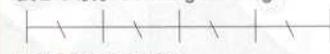


視点が大きく変わる場合
この記号の位置から見る
The viewpoint shifts to
this position.

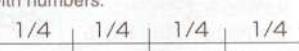


等分記号 Division

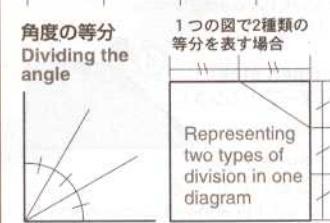
長さの等分 Dividing the length



数字で表す場合もある
The ratio is often represented
with numbers.



角度の等分 Dividing the angle



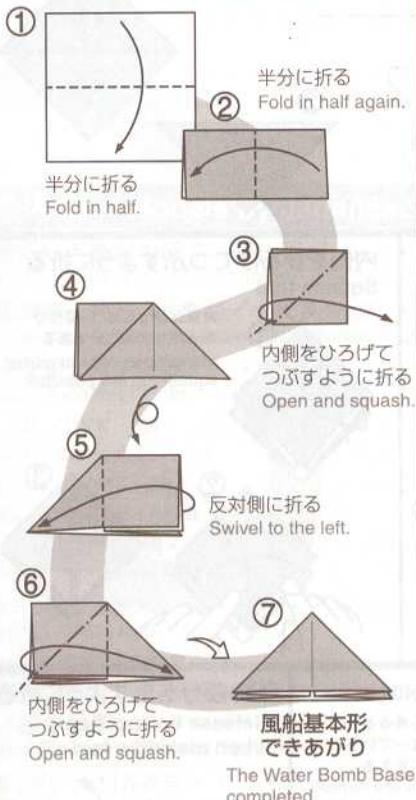
Representing
two types of
division in one
diagram

基本形／沈め折り

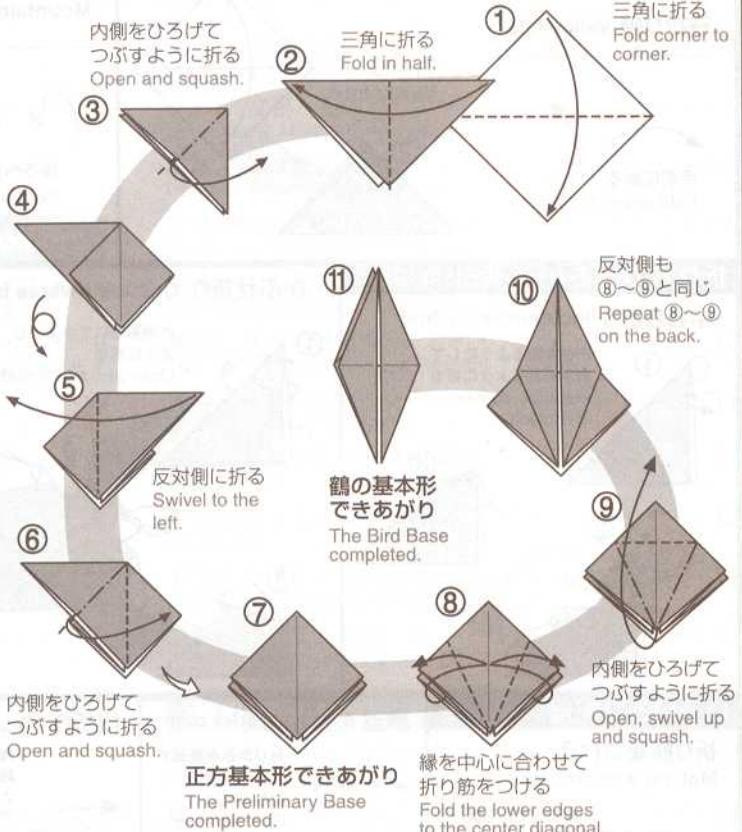
Preliminary Bases and Sink

基本形 Preliminary bases

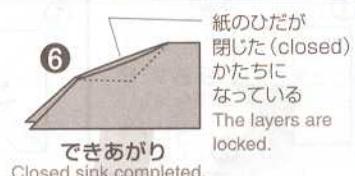
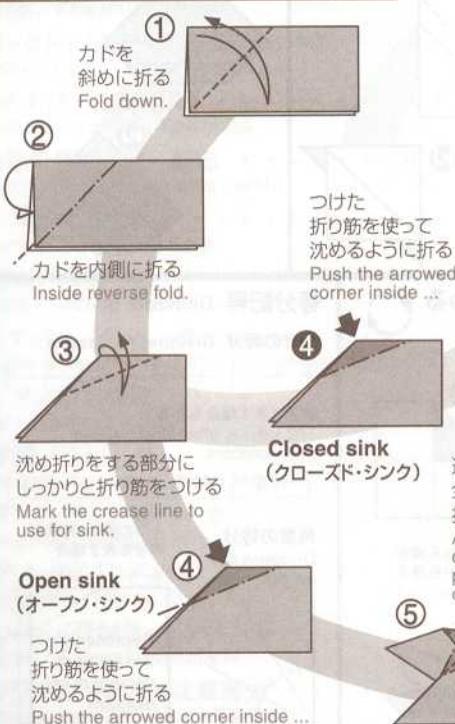
風船基本形 Water Bomb Base



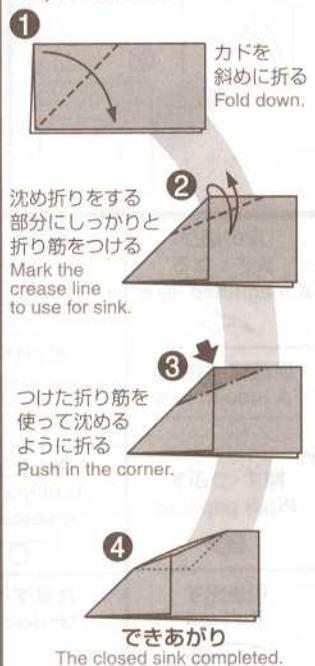
正方基本形と鶴の基本形 Preliminary Base / Bird Base

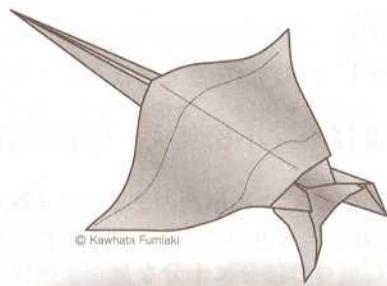


沈め折り Open sink / Closed sink



ひだの形によってはclosed sink
にしかできない場合もあります
Certain complexes of layers allows
only for closed sink.

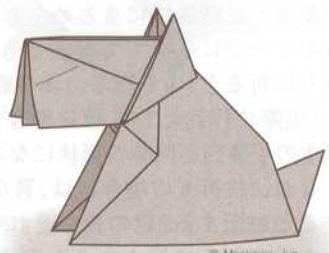
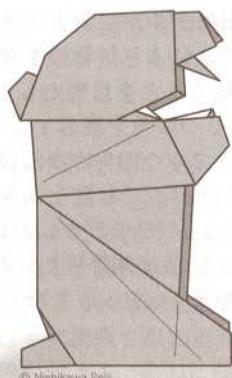
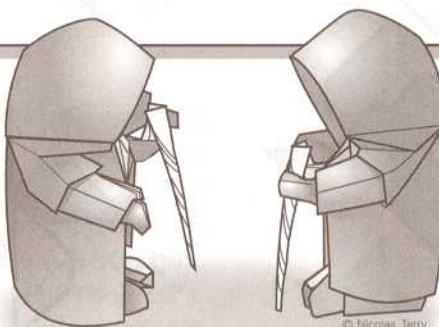




第9回折紙探偵団コンベンション折り図集 9th Origami Tanteidan Convention Book

国内編／Models by Japanese Folders P.6

海外編／Models by Foreign Folders P.170



一枚折り手裏剣の研究

One sheet throwing knife "shuriken"

山田純 小笠徑一 小松英夫 ○ 笹出晋司

1.はじめに

伝承の手裏剣は2枚の紙(2:1の長方形)を使用して折られるが1枚の紙を使用して同じ形を作る研究を行った。概要は下記のとおりである。

- 1)最終の仕上がりが伝承2枚組と同じような動作で紙の層に差し込んで留める構造にした。
- 2)伝承と同じ大きさになる折り方を発見した。
- 3)4つの角、裏表が任意に色分けできる工夫をした。

2.山田モデル

2002年コンベンションで講習が行われたもので、本研究のきっかけになった元祖一枚折り手裏剣である。概念図をfig.1に示す。

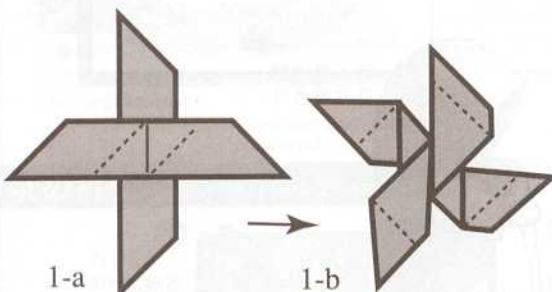


fig.1 山田モデル

1-aは正方形の各辺を5等分し、ボックスプリーツの要領で二艘船様にまとめたものである。これを2つのテープに見立てて裏表とも1-aに示す破線のとおりに折ると1-bを得る。1-bの破線部分を取り去ると(実際に作品として折る場合は内部に折り込む)伝承の手裏剣と同等の形状になることがわかる。

なお、2枚折りの場合には、異なる色の紙を用意すると対面する2組の角がそれぞれ同色になった2色の手裏剣を作成することができ、また、これが一般的であるが、山田モデルにおいても色を変えたい角の部分の紙をひっくり返して裏面を出すことにより実現することができる。

しかしながら、この構造のまま2色手裏剣を作成すると、紙の重なり、引っ掛かりの制約から内部に差し込むベロの部分に十分な長さを確保することができなかった。

3. 笹出モデル初号機

2002年のコンベンションで山田の講習を受講していた筆出はしばらく後fig.2に示す構造を提案した。

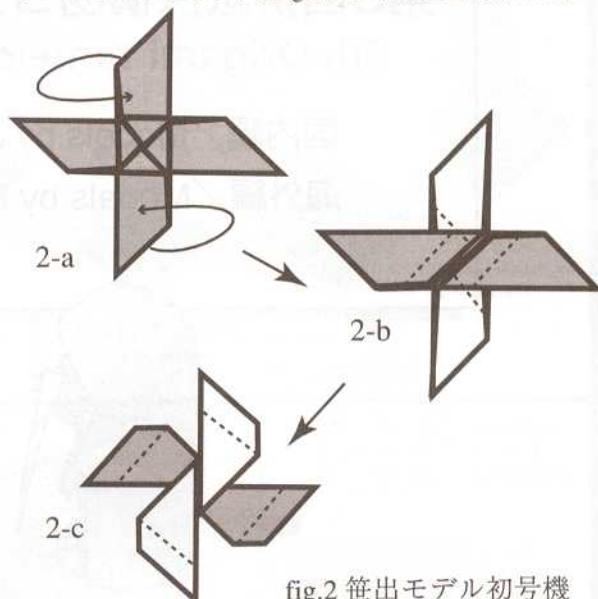


fig.2 笹出モデル初号機

このモデルは、山田モデルが二艘舟であったところを、風車様にしたことにより対称性を増させてベロが短くなることを防ぐことを目的とした。

2-aにおいて対面する2つの角を裏返すことで、2色を実現させたのち、2-bで4つの角となる部分をかぶせ折り(closedかぶせ折り)とでも言うべき折り方にすると2-cを得る。このモデルにおいては、山折り谷折りを工夫すると、表裏同等折りも実現できた。

ただし、紙に無駄が多く、すっきり折ることが難しい。

第9回折紙探偵団コンベンション予稿集

4.小笠モデル

筈出モデル初号機の無駄を排除すれば4等分で実現可能であろうことは直感的に理解できるが、これを最初に実現させたものが、小笠モデルである。

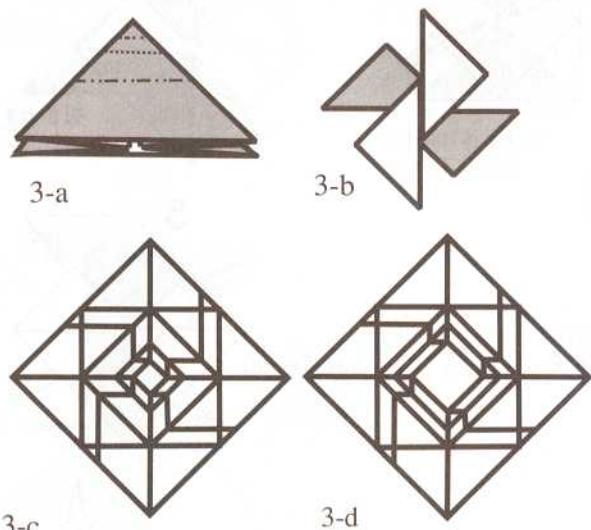


fig.3 小笠モデル

fig.3に示すとおり、風船の基本形の頂点の部分(紙の中心)から上下方向に2等分、4等分、8等分して段沈め折りしてきた二艘船のうち一艘を90度回転させてから風車様にすると2-aを太めにしたものを得ることができる。これを2-aから2-cの手順とほぼ同じように折ると、3-bを得る。これは前述の5等分モデルと比較したとき無駄が排除され、かつ折りやすくなつており優れたモデルと言える。参考に3-cに展開図を示す。また、3-dは筈出によるバリエーションである。(筈出モデル式号機)

これらモデルに関して特筆すべきことは、同じ大きさの正方形から作った伝承作の手裏剣と完成時の大きさが全く同じになることが挙げられる。

5.小松の単純化と筈出の色分け

小笠モデルにより完成したと思われた手裏剣プロジェクトであったが、小松により、中心部を表裏同等ねじり折りすると展開図がより単純化されることが指摘された。あまりに単純な展開図になったこと、また、季刊をる11号に掲載された前川淳氏の表裏同等風車などとの類似性から、過去に作例がないであろうかということが話題になった。

(その後、2002年9月の例会で池上氏、神谷氏より、Jeremy Shafer氏の Promotional Brochure とほぼ同じ展開図であるとの情報をいただきました。しかしながら、100%同じではないこと、また、手裏剣になることは独自研究であり、単純なモデル故の偶然と考えます。)

また、筈出が前川氏のをる11号の記事を参考に色分けモデルを作った。fig.5に参考作例を示す。これらは同じ展開図の山折り谷折りを変えることで実現可能である。ここまで来ると完成形の表と裏で色分けを行いたくなつてくるが、現在のところ6等分額縁折りを仕込んだ後、普通に折るという安易な方法に頼っている。しかし、裏も表も任意に色分けができるため、極めて自由度が高い方法ではある。

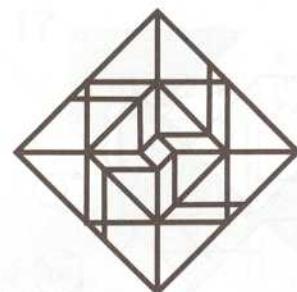


fig.4 小松展開図

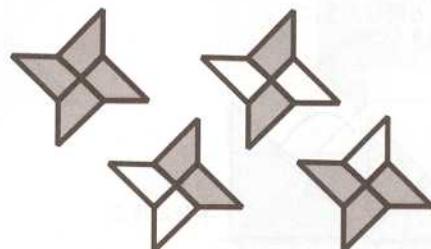


fig.5 色分けのバリエーション

6.おわりに

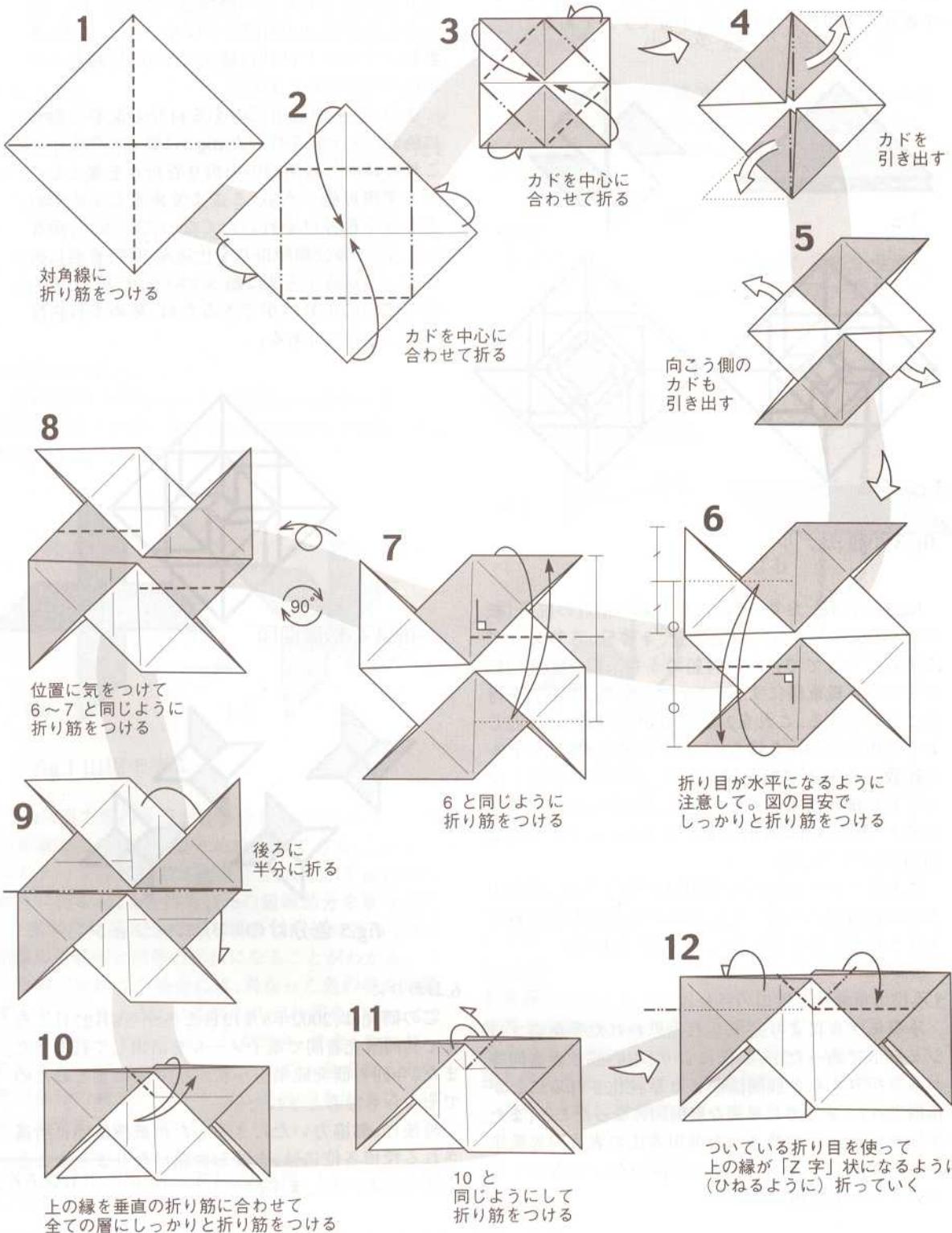
この研究は、2002年8月12日ころから8月22日ころまで共同研究者間で電子メールを活用して行なった。また、今回の研究成果を小松が折り図にまとめたのでそちらも参考とされたい。

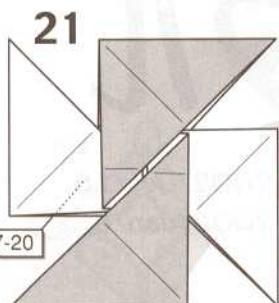
最後に、御協力いただきました折紙探偵団に所属される探偵各位には、大変お世話になりましたことを深く感謝いたします。

表裏同等一枚折り 手裏剣

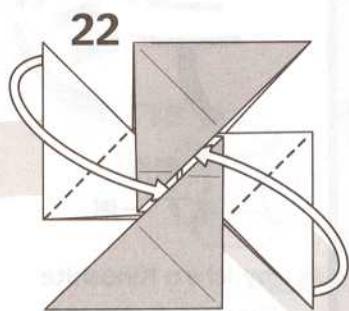
作=山田純+笹出晋司+小笠原一十+小松英夫

Model designed by Yamada Jun, Sasade Shinji, Kozasa Keiichi, Komatsu Hideo Diagrams produced by Komatsu Hideo

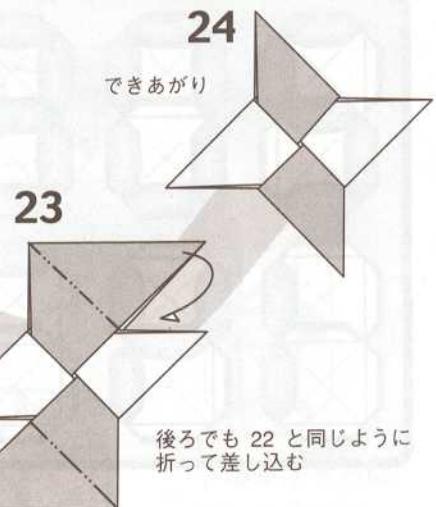




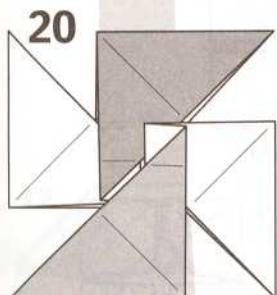
裏側も 17~20 と同じように折る
(今度は白いカドを折る)



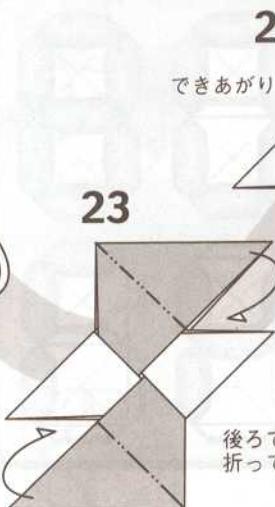
カドを折って
すき間に差し込む



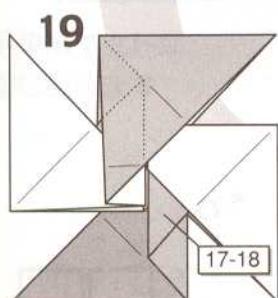
後ろでも 22 と同じように
折って差し込む



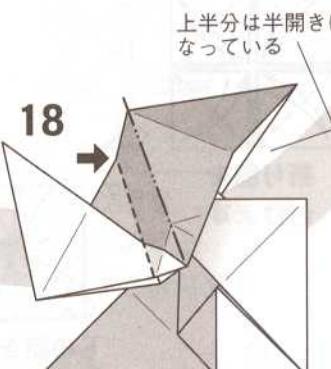
濃い色で示した紙を
手前に持ってくる



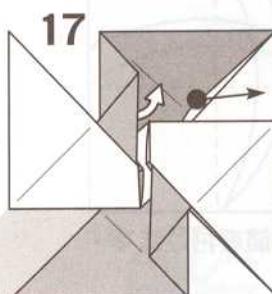
できあがり



下のカドも 17~18 と
同じように折る

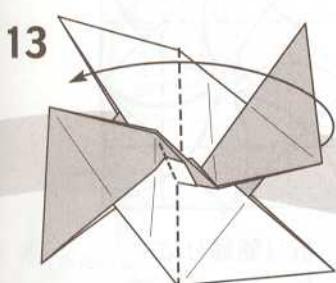
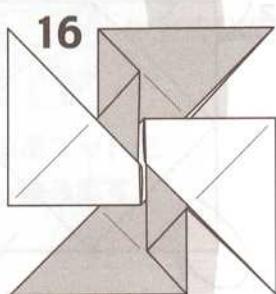


黒矢印のところを
押し込んで
平らにまとめなおす

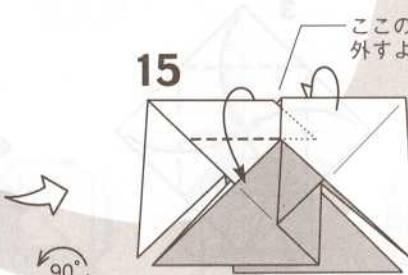
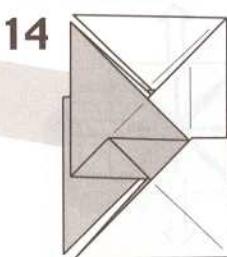


黒丸のところ
(表の 1 枚のみ)
を持って
そっと引き出す

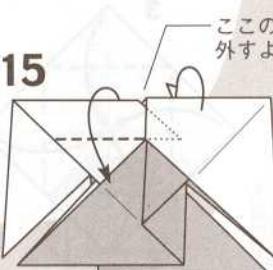
中心付近の
折り込みが
ほどけて分離する



途中図
平らに半分に折り畳む



15



ついている折り目を使って
上の縁を互い違いに折る

デジタル

創作

木下 一郎

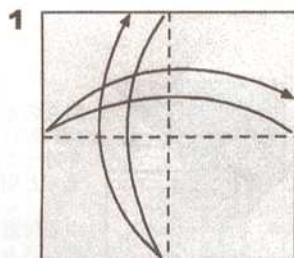
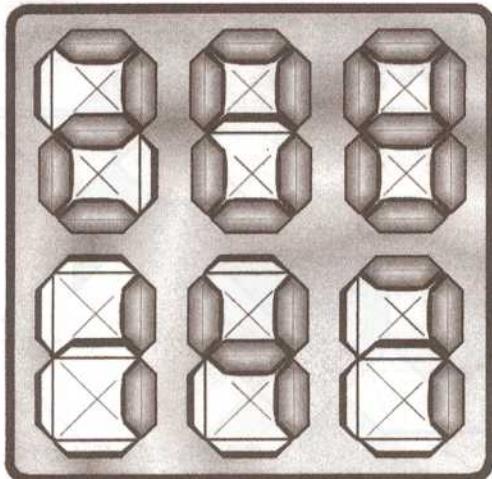
2002/Dec/15

2003/Jan/3

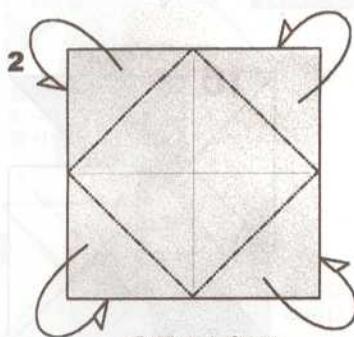
by Ichiro Kinoshita

Diagram & Arrange

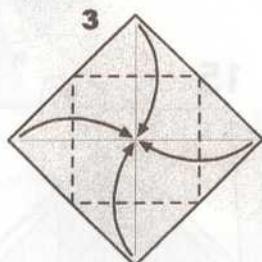
Eiji Tsuchito



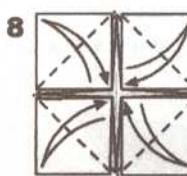
折り筋を付けます



さぶとん折り



さぶとん折り



折り筋を
付けます

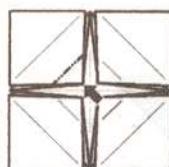
8

9



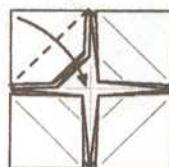
折り筋を付けます

10

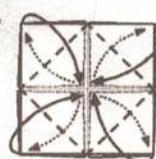


渋め折り

11

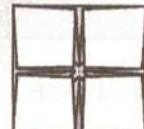


7

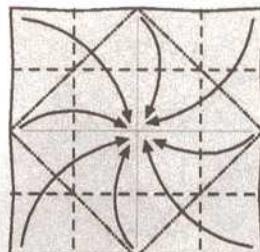


下の紙を上に
出しながら折ります
(はね折り)

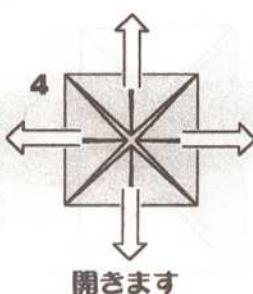
6



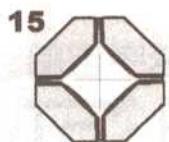
5



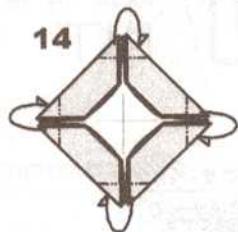
折り筋通りに
折りたたみます



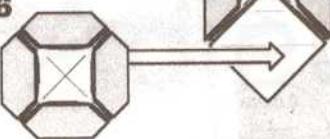
開きます



15

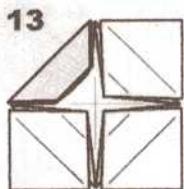


14

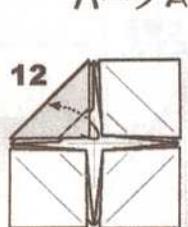


16

上に重ねます



13

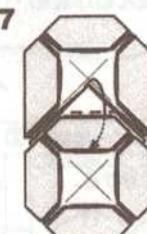


12

バーツ A
残り 3 カ所も
8~12までと
同じように折ります

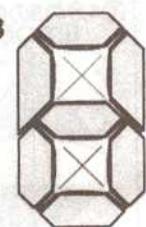


15



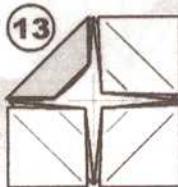
17

下のポケットに
差し込みます



18

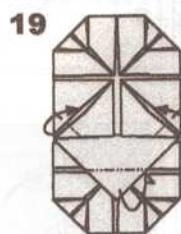
下のポケットに
差し込みます



13

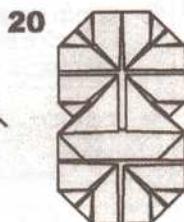
バーツ B

残り 2 カ所も
8~12までと
同じように折ります



19

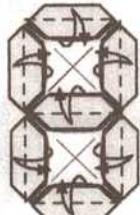
ポケットの
中で折ります



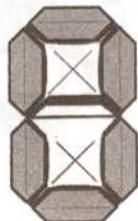
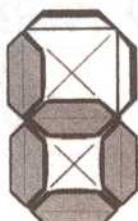
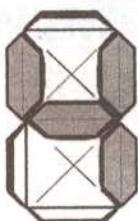
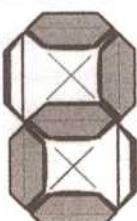
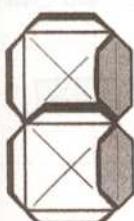
20

下のポケットに
差し込みます

21



折り癖を付けます



超光速宇宙船

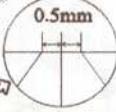
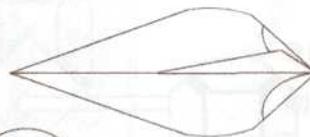
銀河

2002年 6月20日 製作

2003年 7月 1日 計画

山下 明

知的生命体を求めて、
銀河間を飛び続ける
宇宙船です。
宇宙人に
還えるかなあ・・・



⑥、⑧、⑩の谷線は、定規を使ったほうが楽です。※は糊付けの印です。

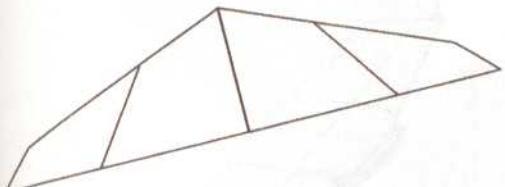
① A4コピー用紙を三つの部分に切り分ける。 	② 本体を折る 	③ 	④ 	⑤ ここで「0.5mm」がなくなるはずです。 	⑥
⑦ 4分の3の位置に印をつける。 	⑧ 印から谷線を折る。分度器などを使って昇降舵の線をひく。 	⑨ 	⑩ 三角の斜面に沿って谷線を折る。 	⑪ ⑤～⑩でつけた線を右の図になるように折る。 	
⑫ 塘料タンクAを折る 	⑬ 	⑭ 	⑮ 		
⑯ 糊付け 	⑰ タンクBも同様に折る 	⑱ 翼の中(斜線部分)にタンクを差し込む 	⑲ 飛ばし方 A 丸部分をつまんで飛ばす 		
⑲ 四角を適当に折って翼を丸く見せる。 	⑳ ゼロテープで補強 	※ できるだけ 裏へ 外側へ 	※ この部分の断面図 	⑳ 空母へ着艦するときの フックです・・・、おかしい? 	㉑ 飛ばし方 B 丸部分に爪切りで切り込みを入れ 三本つなげた輪ゴムを引っ掛け飛ばす
㉒ 					

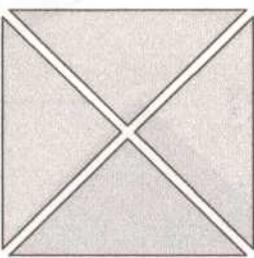
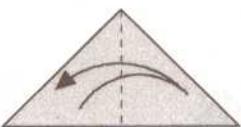
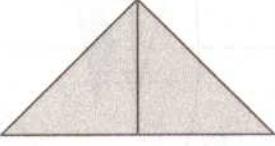
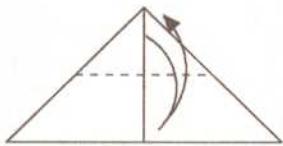
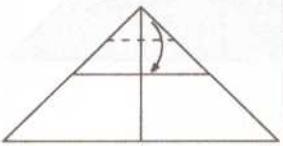
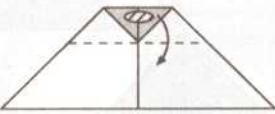
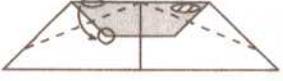
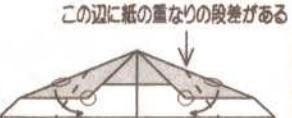
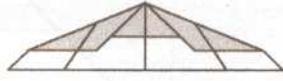
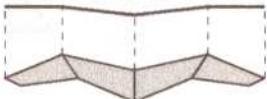
アデュー

2003年 3月30日 創作
2003年 7月 1日 作図

Adieu

山下 明



<p>① 15cmの折紙を4等分します。</p> 	<p>②</p> 	<p>③</p> 
<p>④</p> 	<p>⑤</p> 	<p>⑥ カるく糊付けして折ります。</p> 
<p>⑦ 左右の肩を糊付し、上の線が下の紙の角と合うように折ります。</p>  <p>* つまり、左右とも糊付し、左右とも折ります。</p>	<p>⑧ 紙の重なりの段差があるところから、辺と角を合わせるように折ります。</p> 	<p>⑨ 翼を広げ(戻し)ます。</p> 
<p>⑩ 一応、できあがり。 でもここから少し形を整えます。</p> 	<p>⑪ 翼は水平に、中央の角度は、可能な限り、大きくする。 早い話が、できるだけベッチャンコに！ (それでも、優雅に飛ぶぞ！)</p> 	<p>⑫ 飛ばし方 ★印のところを親指と人差し指で上下からつまんで、そっと押し出すように飛ばす。</p> 

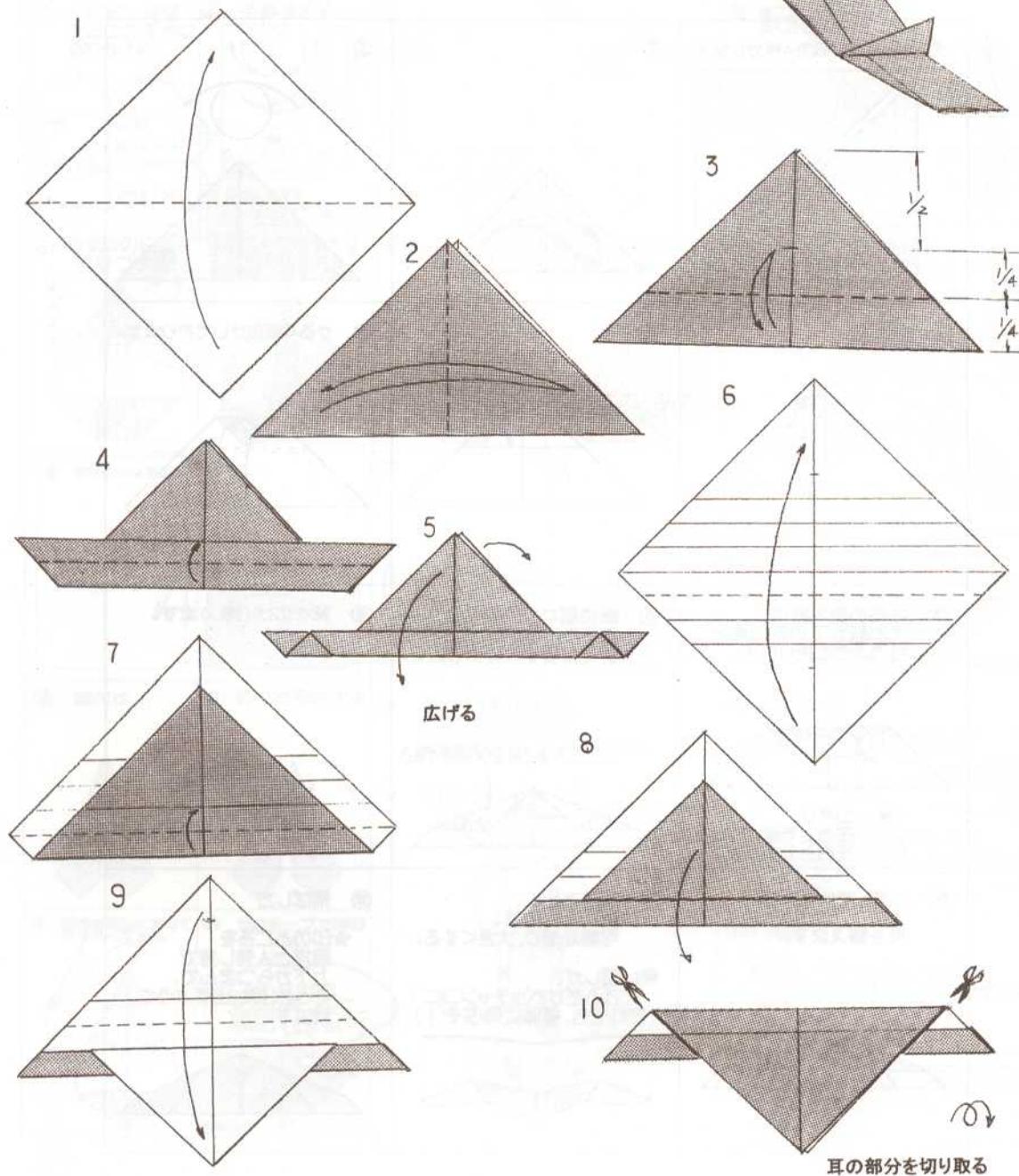
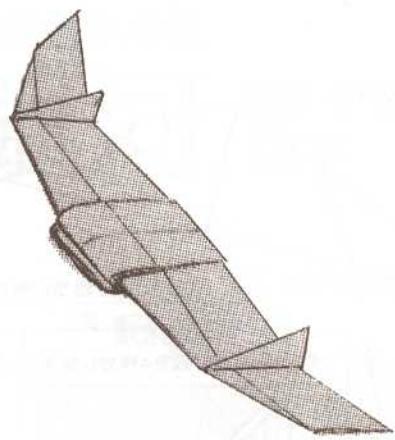
メーヴェ

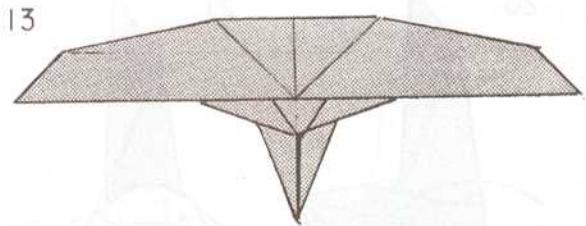
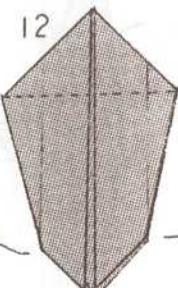
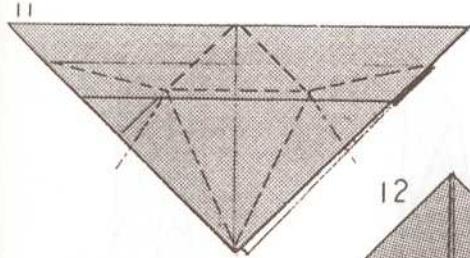
2003/4/10

黒川 紀男

アニメ「風の谷のナウシカ」の主人公ナウシカの愛機「メーヴェ」
をモデルに作りました。

紙が重なり少し折りにくいですが、簡単な調整で軽快に飛びます。

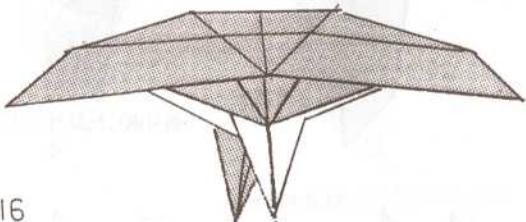




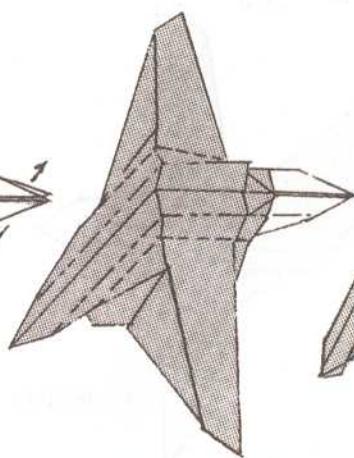
中の部分を引出し2枚にして重ねる
途中図



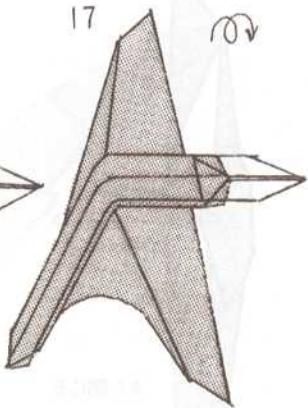
左右に開き引張る



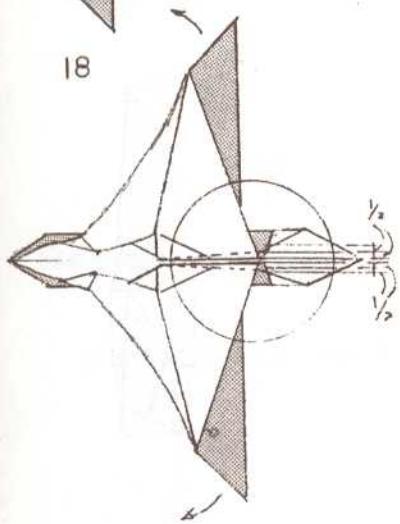
16



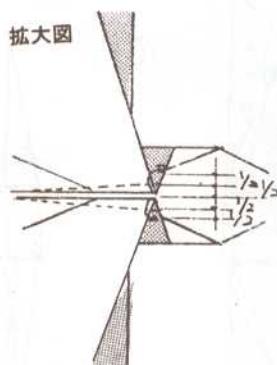
17



のように折る

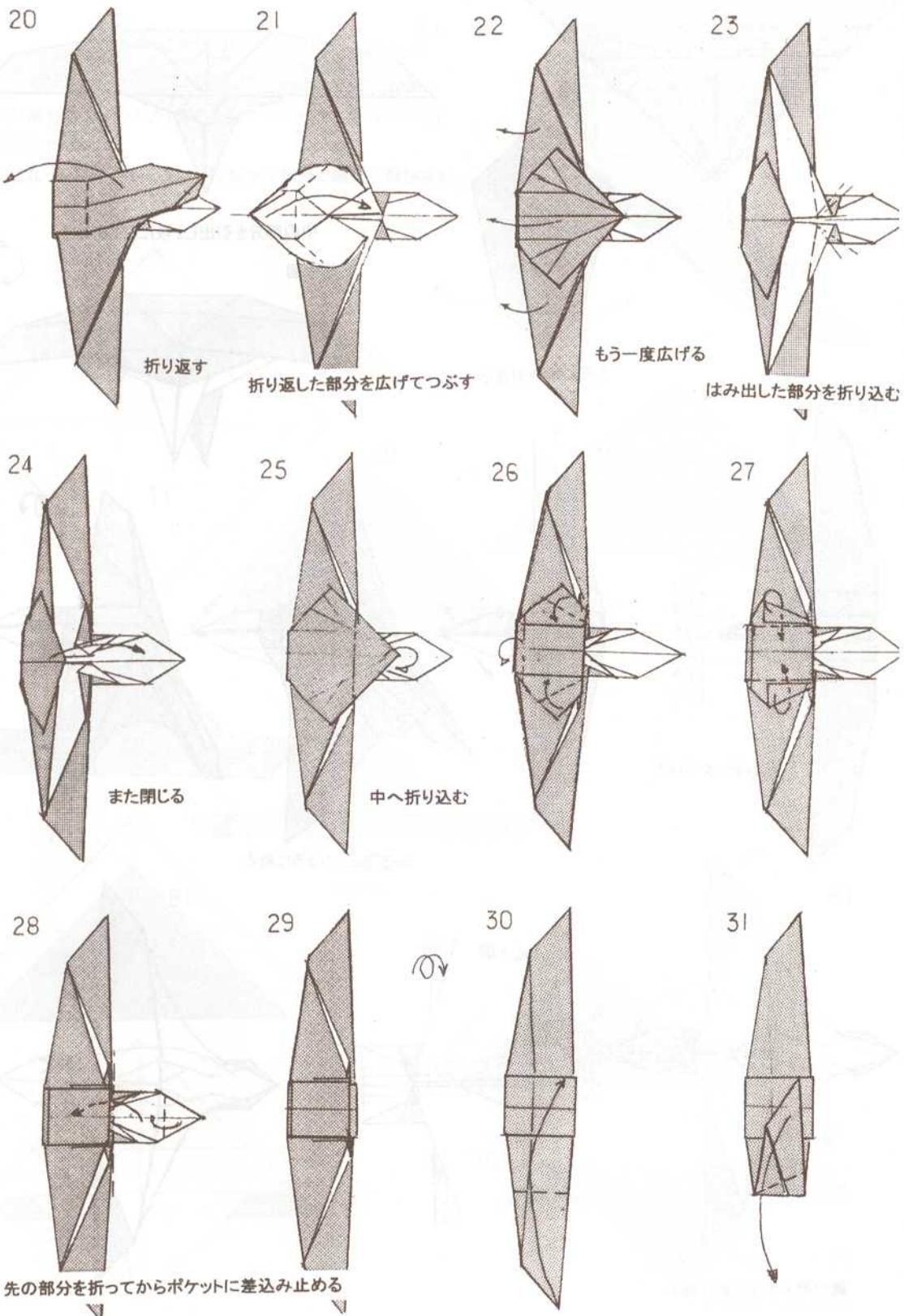


18

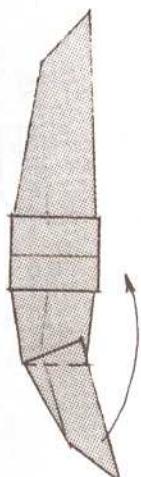


19

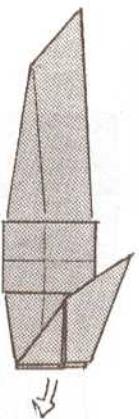
翼の部分を少し前に振る



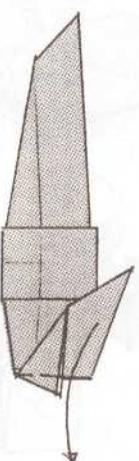
32



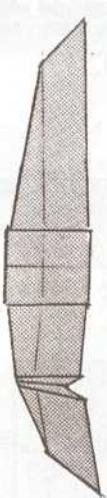
33



34



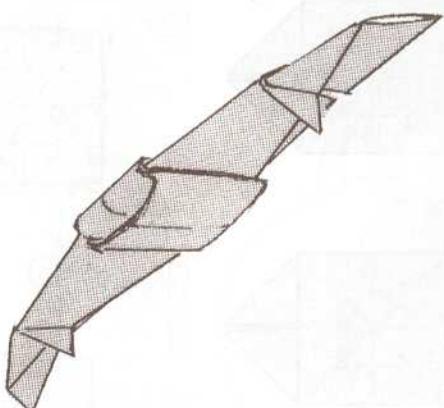
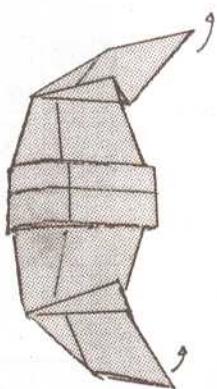
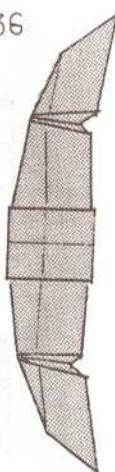
35



中の部分を引き出す

反対側も同様に折る(30~34)

36

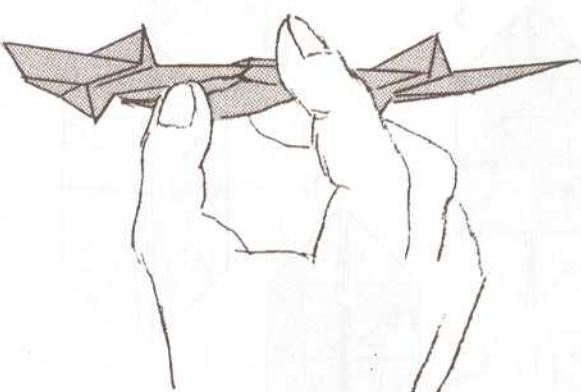


完成

正面図



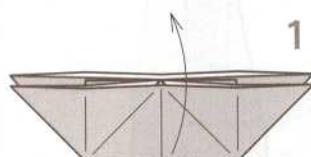
翼は水平に、翼端の後ろの部分を少し上げる



三本の指で持ち飛ばす

StarShip

2003.02.17

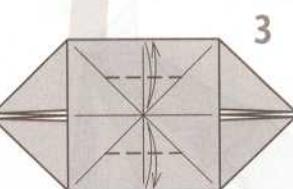


1

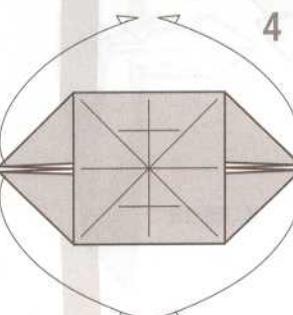
(にそうぶねきほんけい)



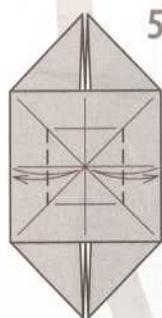
2



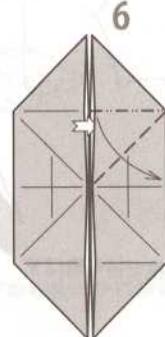
3



4



5

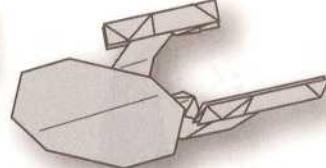


6

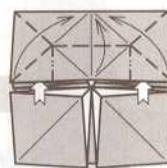


7

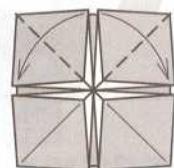
のこりの
3かしょも
おなじ



10



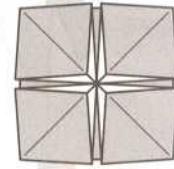
ひらいておりたたむ



9



8

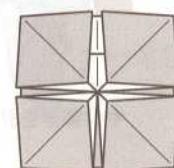


7

創作：青木 良

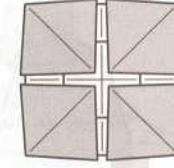
11

12

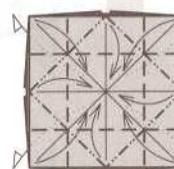


のこりの3かしょも
おなじ

13

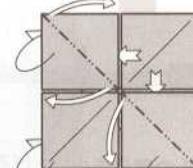


14



よせるようおりたたむ

15



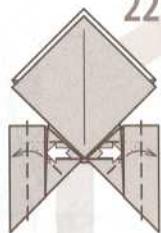
ひらいておりたたむ

16



なかのカドを
なかわりおり

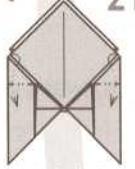
22



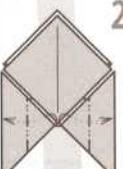
ひらいておりたたむ



21

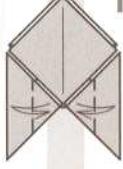


なかわりおり

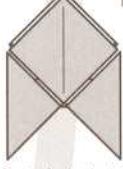


なかわりおり
うらもおなじ

19

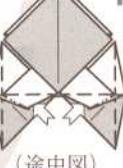


18

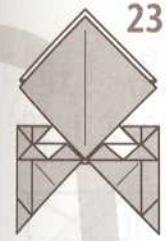


うらもおなじ

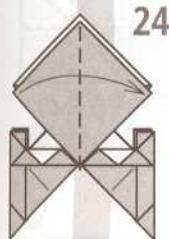
17



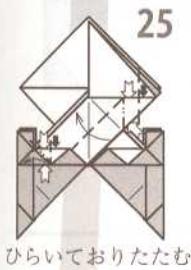
(途中図)



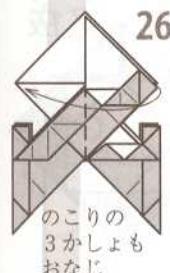
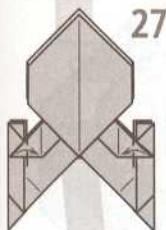
うらもおなじ



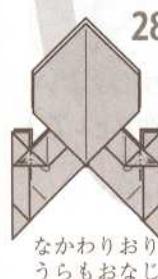
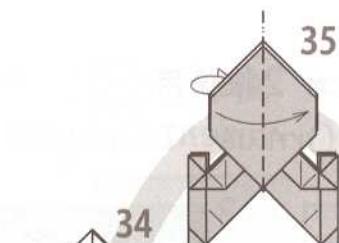
24



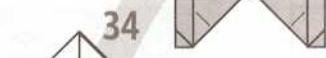
ひらいでおりたたむ

のこりの
3かしょも
おなじ

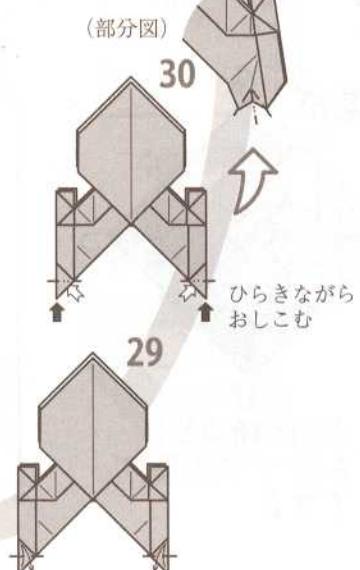
27

なかわりおり
うらもおなじ

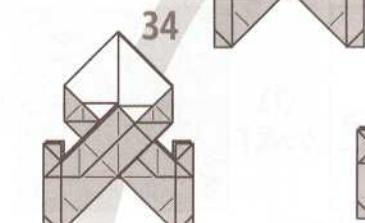
34



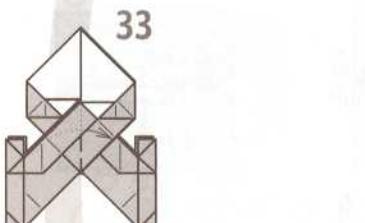
30



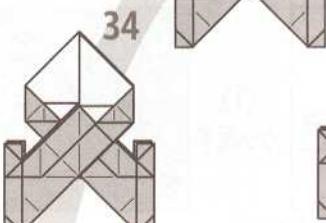
29

ひらきながら
おしこむ

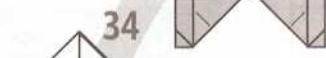
32



33



34



35



36



37



38



39



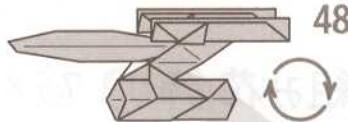
40



41



42



43



44



45



46



47



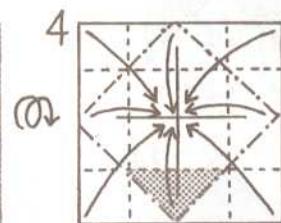
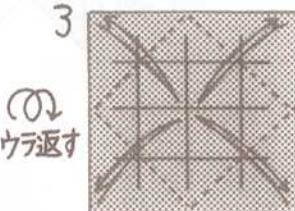
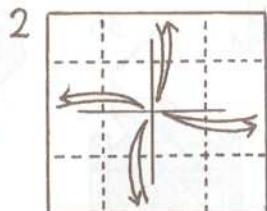
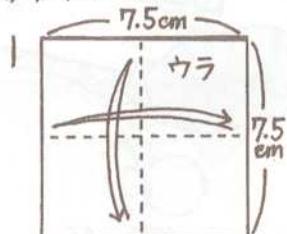
48

中島 進

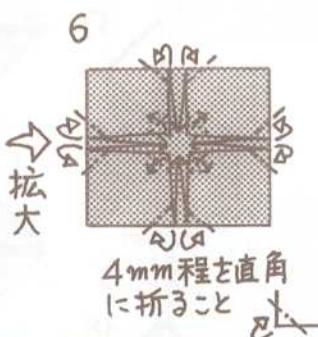
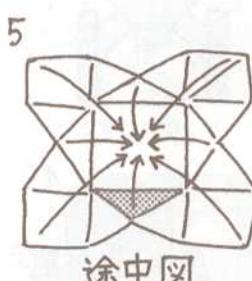
H15(2003). 1. 10.

[2枚組み花飾り] 7.5×7.5cm 2枚使用

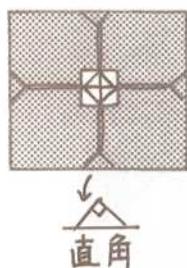
(A) 花 (赤・ピンク系) Flower Ornament (2pieces)



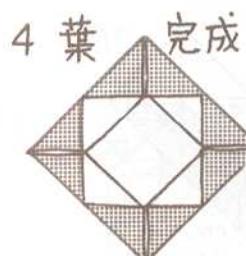
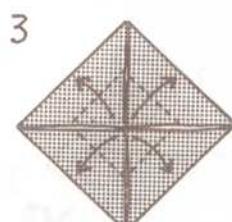
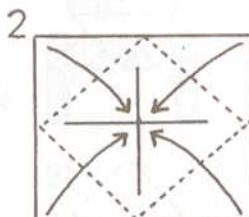
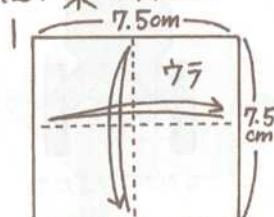
$4 \times 4 = 16$ マスをつくる



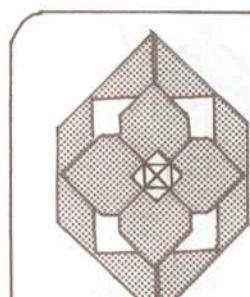
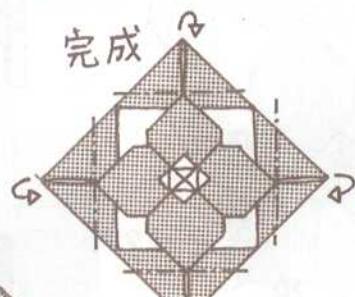
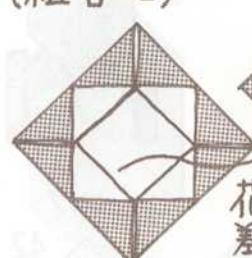
7花完成



(B) 葉 (緑系)



(組合せ)

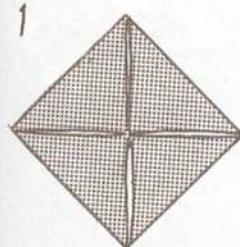


花の間に葉の辺を
差込む
(4辺)

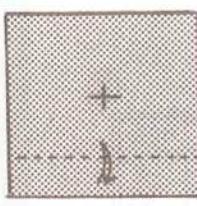
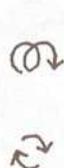
ウラに折ると
6枚で「クス王」か
でできる

この形もよい
(飾りとして)

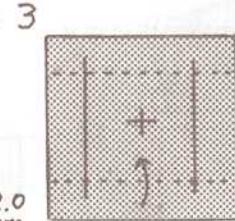
[箱] 7.5×7.5cm
(フタ) 15×15cm 1枚} 2枚} 計3枚



葉の3より
(座ぶとん折)



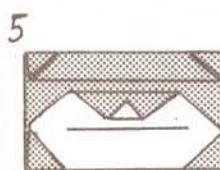
4辺とも折る



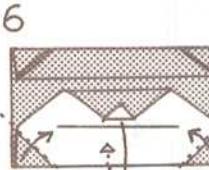
4



下の紙を引出
す(ウラより)

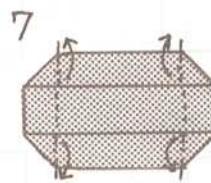


5



6

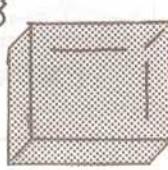
ウラに底す
(上側も同じ折り)



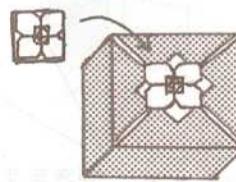
7

広げて箱
にする

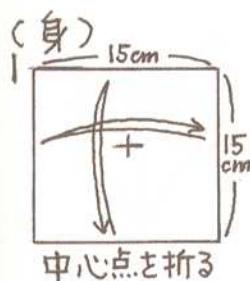
8



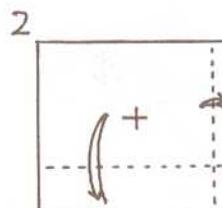
9 フタ完成



中に花を入れる

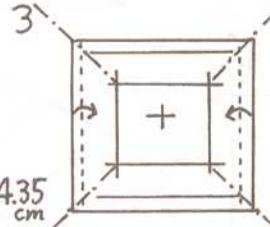


中心点を折る

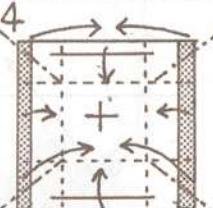


2

4辺とも折る



3



4

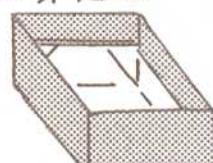
箱の形にする



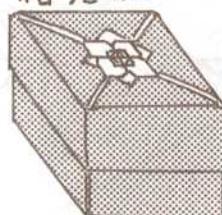
のり付け

ういている所は
のり付けする

6 身完成



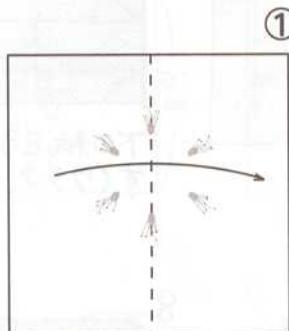
箱完成



フタと身を合わせ完成

桜 田中稔憲・作・図

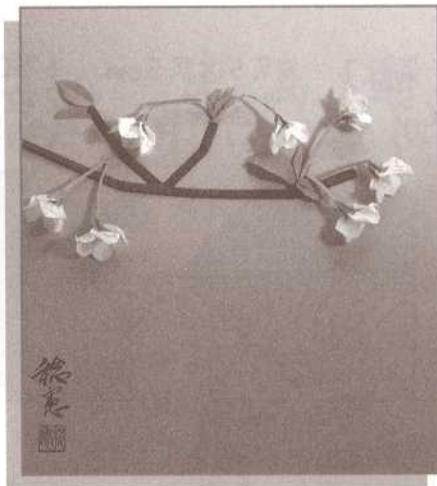
花弁 5cm 角くらいの紙で折ります



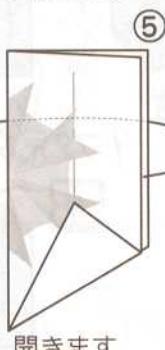
①



②



中表で始めます



⑤

開きます

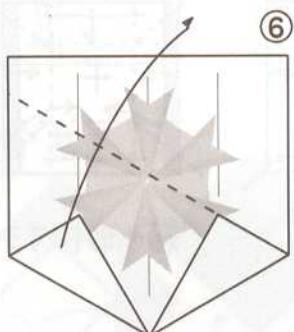


④

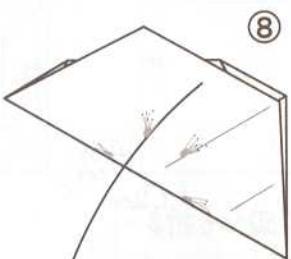


③

裏も同様に

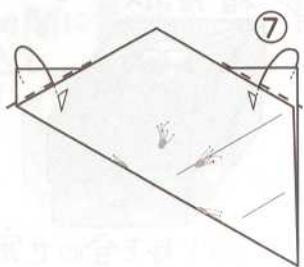


⑥

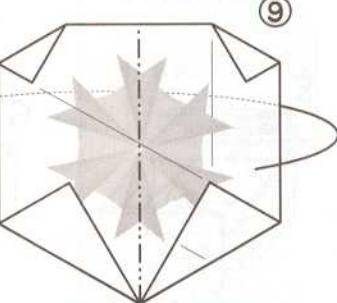


⑧

開きます

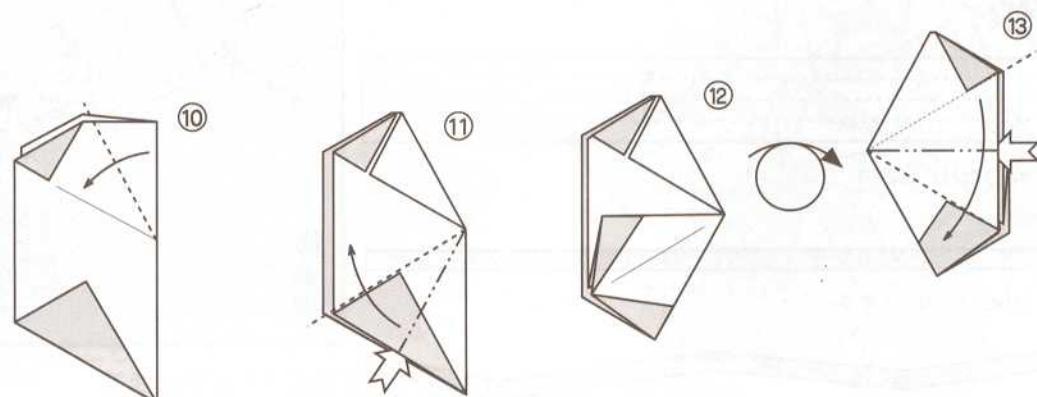
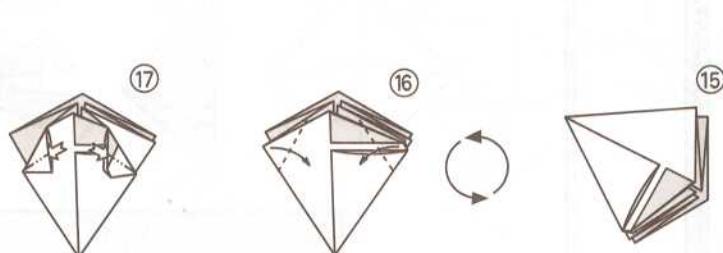
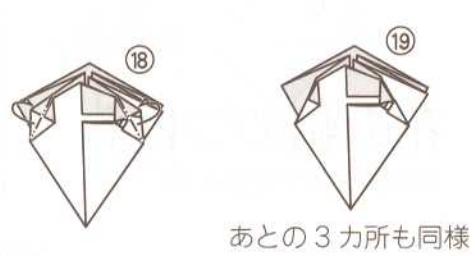
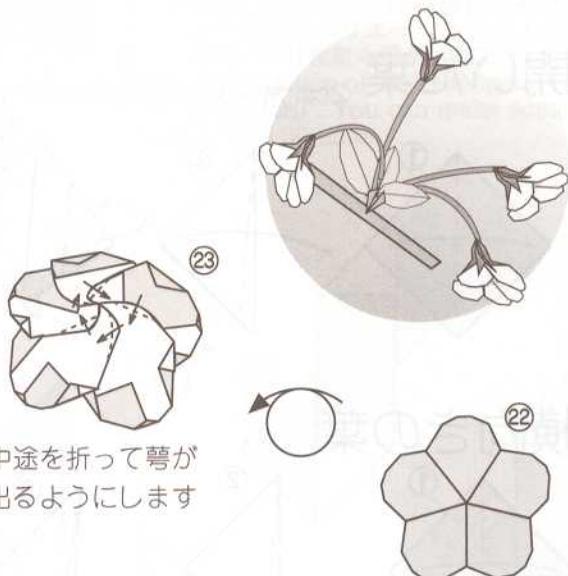
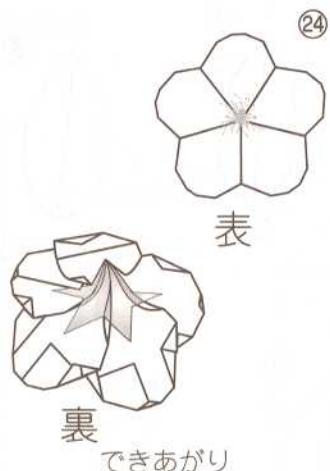


⑦



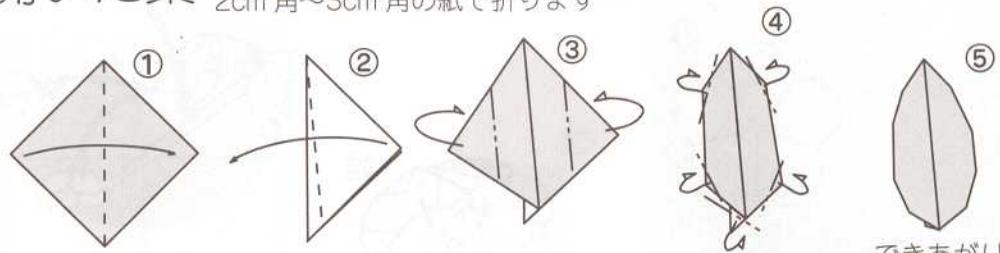
⑨

以下印刷した模様を
省略し、表面を塗り
で示します



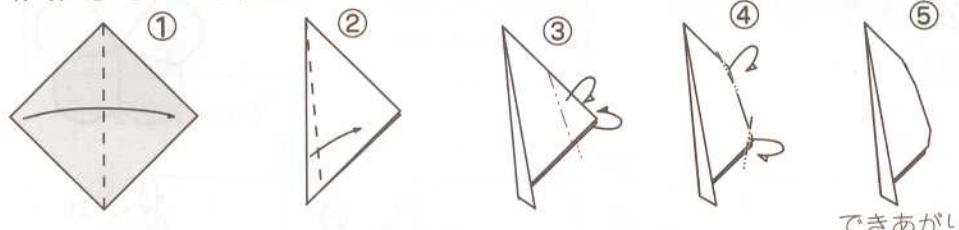
開いた葉

2cm 角～3cm 角の紙で折ります



できあがり

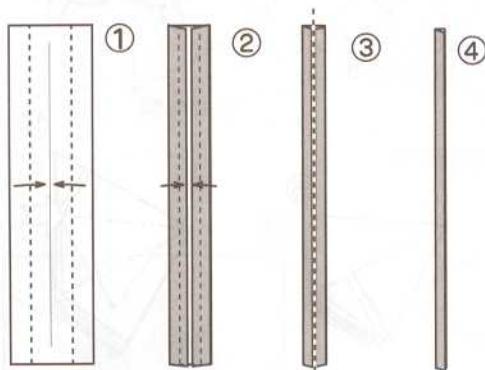
横向きの葉



できあがり

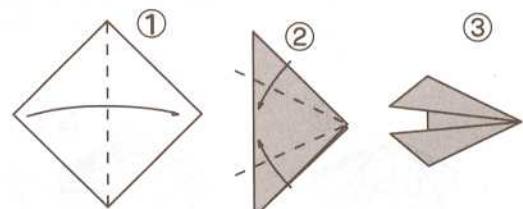
花の軸

幅 1cm 長さ 3～5cm の紙で折ります

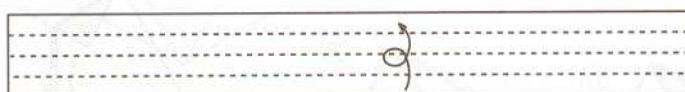


花の軸のつけね

1cm 角の紙で折ります



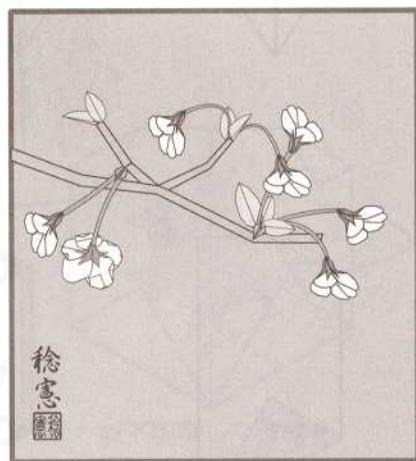
枝



4つ折りにします



自由に折り曲げます



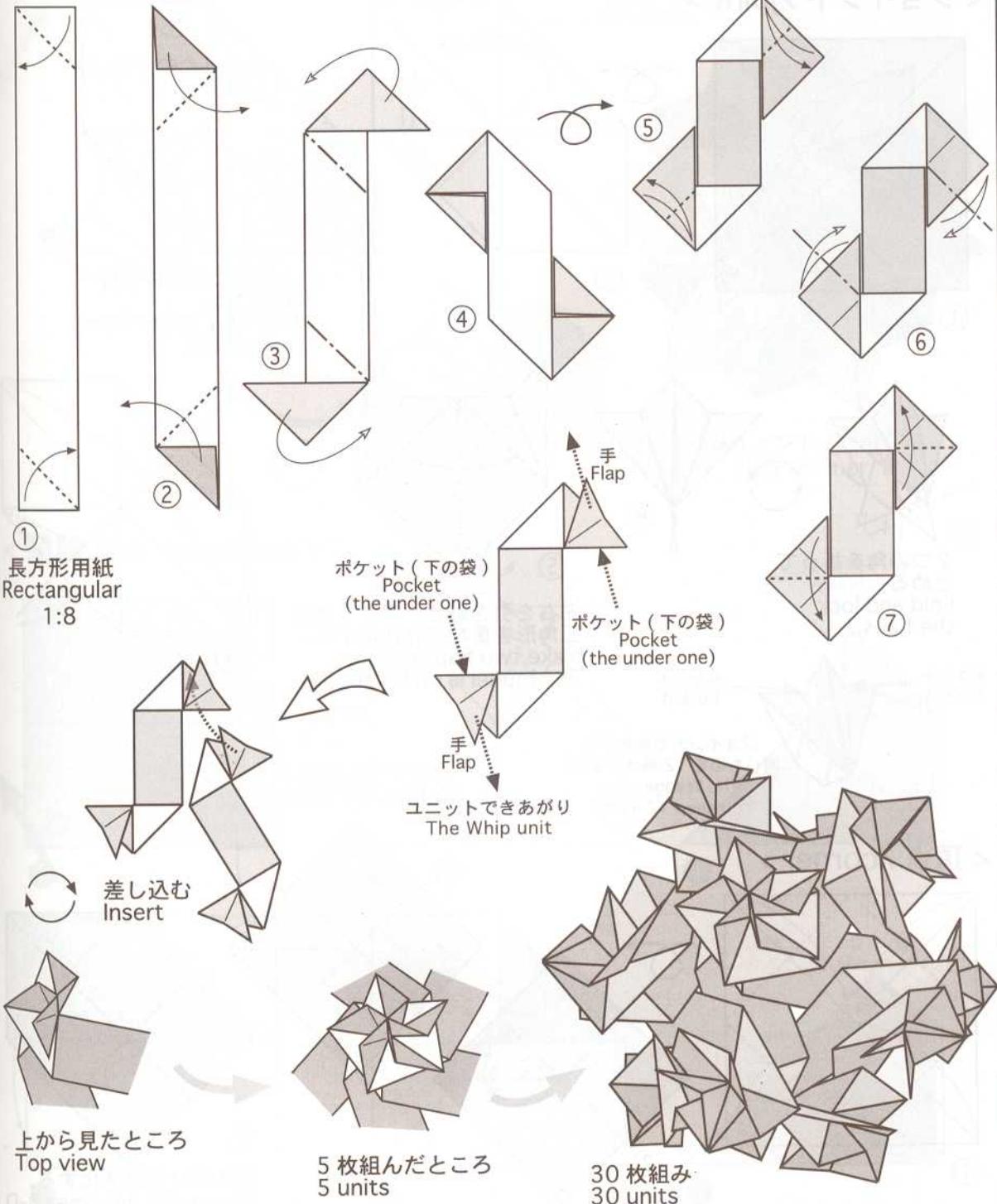
このように飾ります

ホイップ / Whip

川村みゆき
©2003 Miyuki Kawamura

Created 20030413
Drawing 20030704

「第8回コンベンション折図集」に載せた「セレス」という作品のバリエーションの1つです。6枚、12枚、30枚組み等が可能です。
"Whip" is a variation of "Celes(Origami Tanteidan 8th Convention)". You can make some models with 6,12, and 30 units.



ウェッジ / Wedge

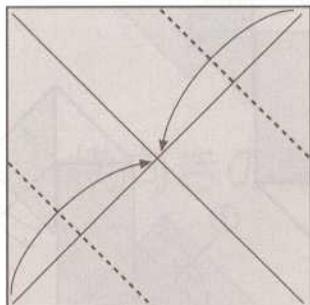
Created 2003040
Drawing 20030704

川村みゆき

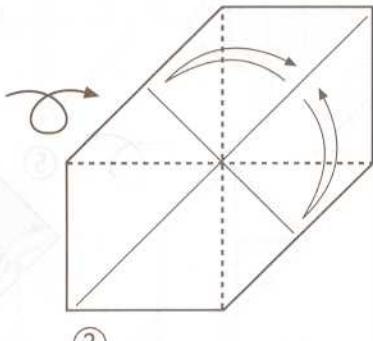
©2003 Miyuki Kawamura

ジョイントと頂点で合計 20 枚使います。同じ大きさの正方形用紙を使って下さい。
You need 20 square pieces of paper, all the same size.

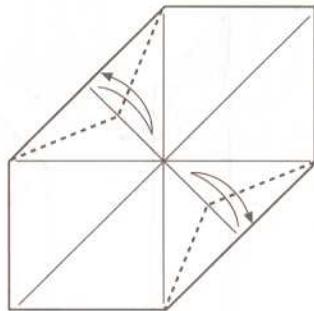
< ジョイント / joint >



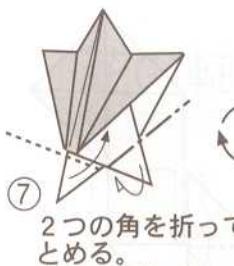
①



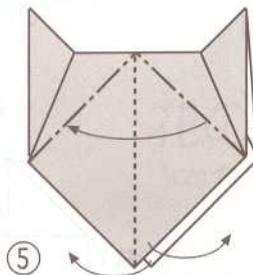
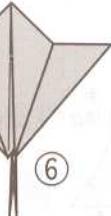
②



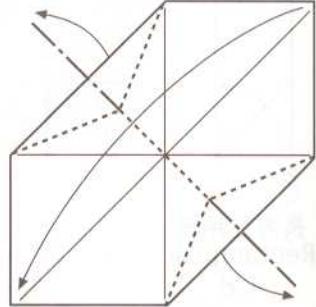
③ 上の紙だけに折り目をつける。
Fold only upper layer and unfold.



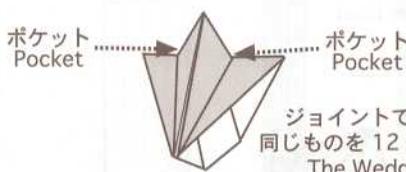
2つの角を折ってとめる。
Fold and lock the flaps.



左右を引き寄せ、中で2枚の三角形を重ねて立体化する。
Make two flaps inside.
The model is no longer flat.



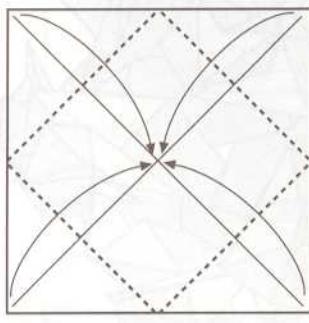
④



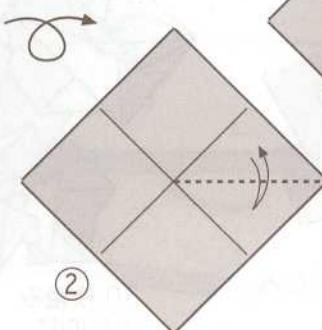
ジョイントできあがり
同じものを 12 個作ります。
The Wedge joint
You need 12 joints.

角を 1 つだけ開く。
Unfold one corner

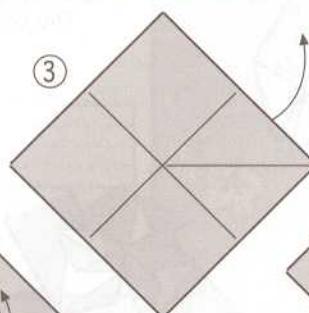
< 頂点 / corner >



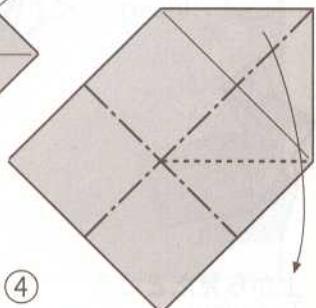
①



②

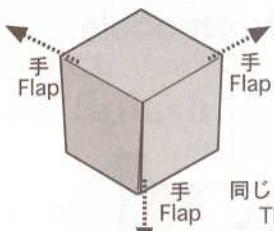
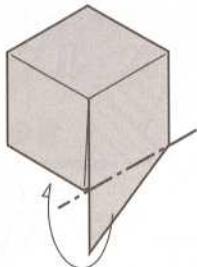


③



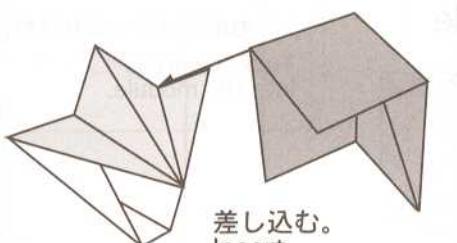
④

引き寄せて立体化する。
The model becomes 3-D.

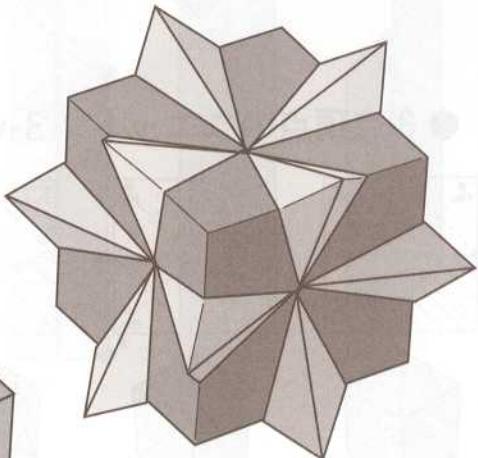
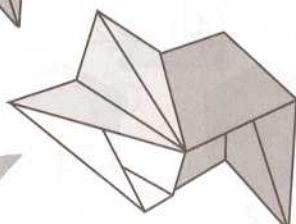


頂点できあがり
同じものを8個作ります。
The Wedge corner
You need 8 corners.

⑤ 角を中へ入れる。
Tuck the flap inside.

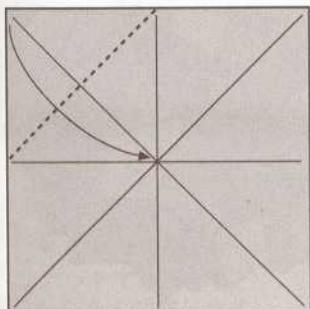


差し込む。
Insert

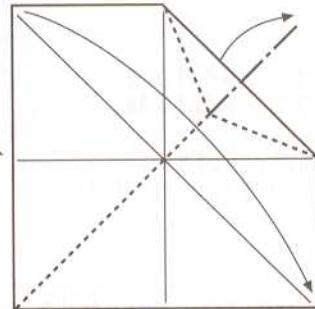


ジョイント/joint: 12
頂点/corner: 8

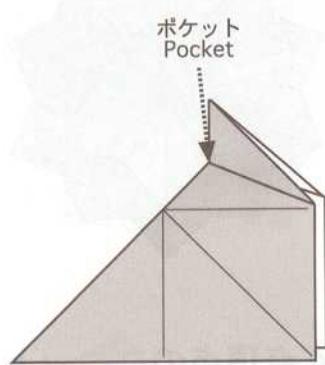
<発展 /for more fun >



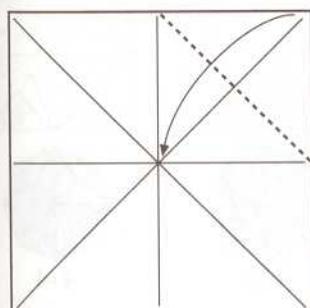
1



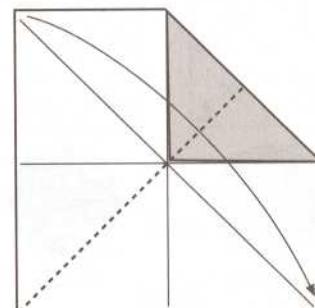
2



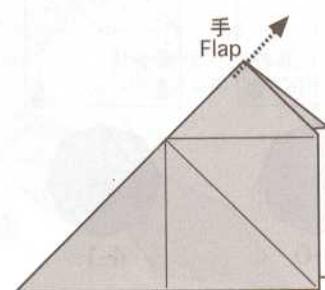
3



1

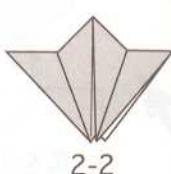
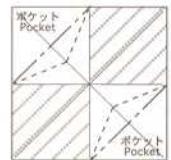
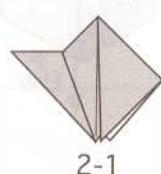
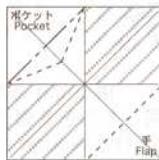
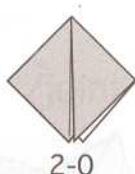
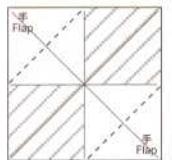


2

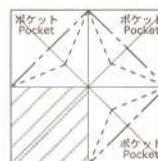
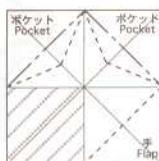
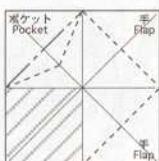
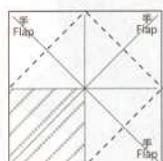


3

● 2点頂点のユニット / 2-vertex module



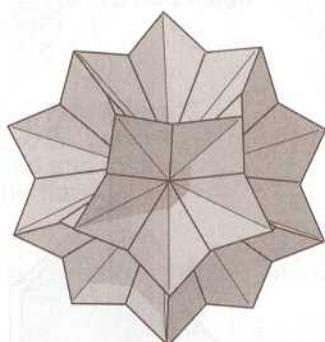
● 3点頂点のユニット / 3-vertex module



///の部分は中へ折り込む。
Tuck the areas "///" into the module.

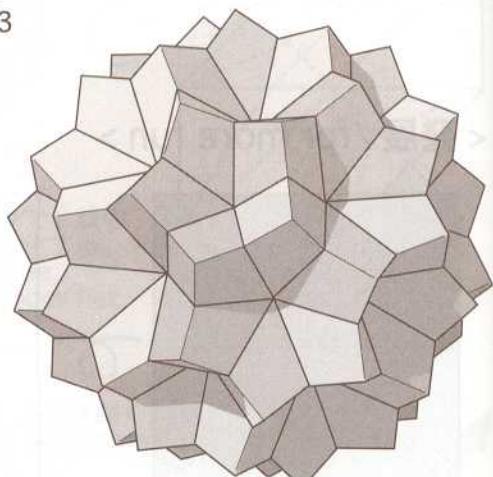
3-1 ユニットが 30 個、
3-2 ユニットが 30 個。

You need
30 modules of "3-1"
and 30 modules of "3-2".

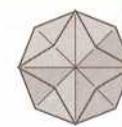
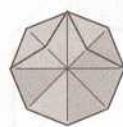
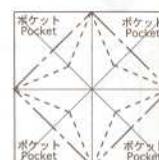
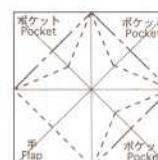
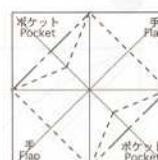
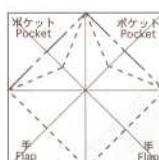
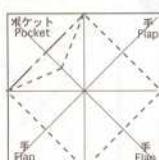
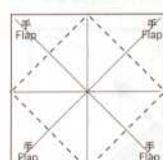


3-1 ユニットが 10 個、
3-2 ユニットが 10 個。

You need
10 modules of "3-1"
and 10 modules of "3-2".



● 4点頂点のユニット / 4-vertex module



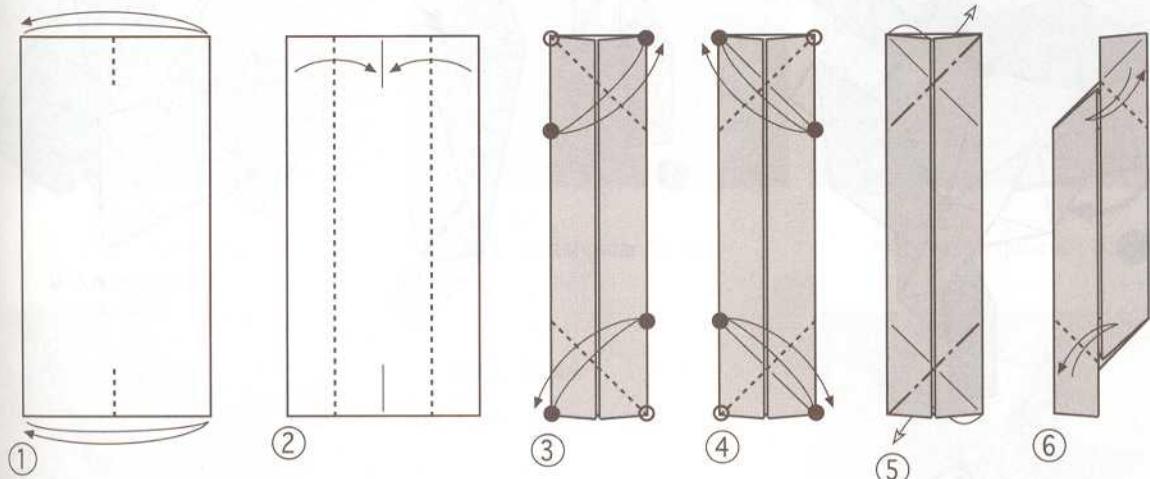
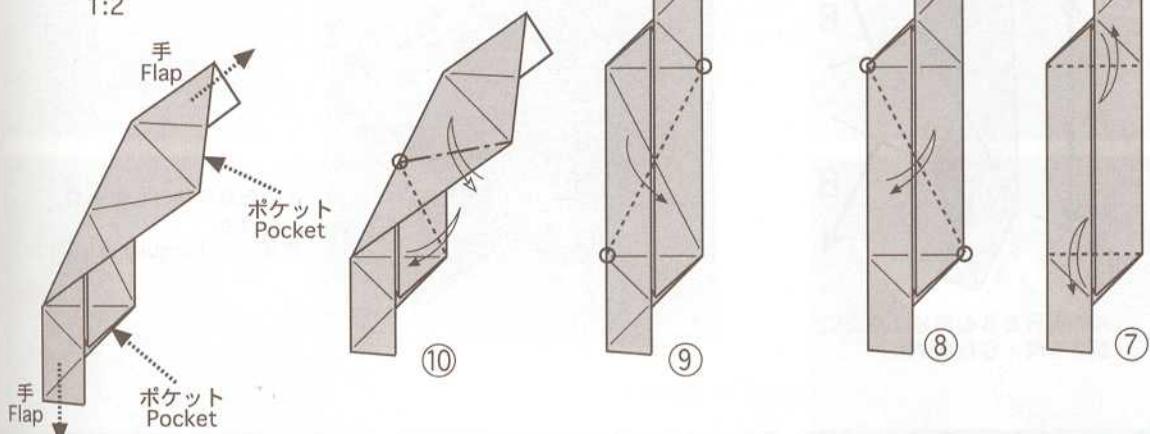
※ 4-2b ユニットはデビッド・ミッ切尔さんの「ジェミニ」のユニットと同じものです。
The module of "4-2b" is the same as "Gemini" module by David Mitchell.

Created 19970221
Drawing 20030731第3回折紙の科学国際会議（2001年3月）
で展示した作品です。

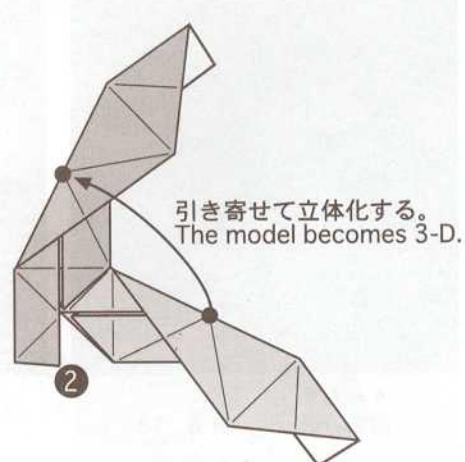
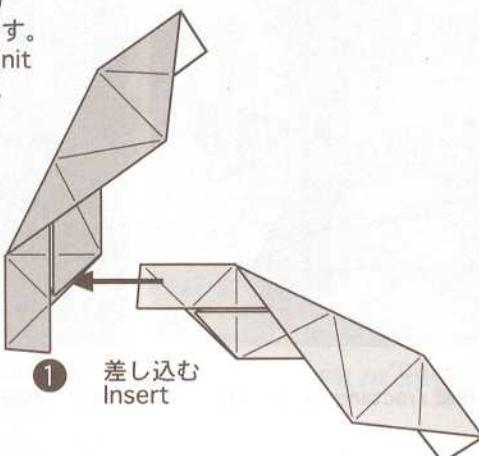
クリスタル・スプラッシュ /Crystal Splash

川村みゆき

©2003 Miyuki Kawamura

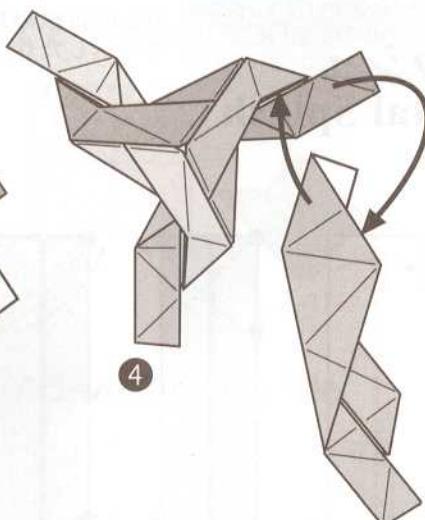
長方形用紙
Rectangular
1:2

ユニットできあがり
同じものを6個作ります。
The Crystal Splash Unit
You need 6 joints.

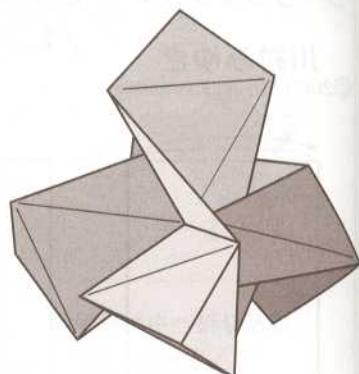




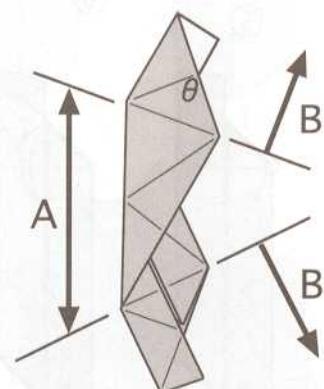
3



4



6枚組できあがり
6 Units



A の部分と B の部分は独立に長さを変えられます。



B の部分を伸ばしたもの。
 $\theta = 36^\circ$
用紙 /rectangular 6 : 14.5



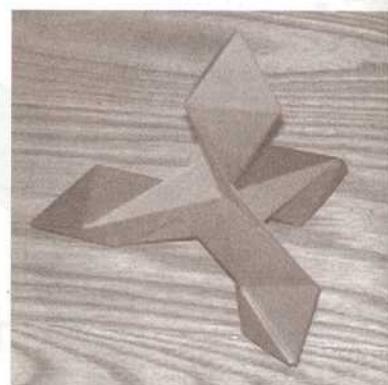
$\theta = 60^\circ$

用紙 /rectangular 6 : 18



$\theta = 60^\circ$

用紙 /rectangular 6 : 16

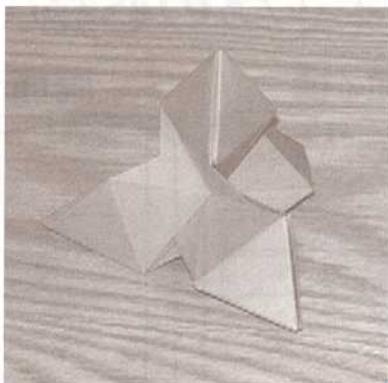


$\theta = 60^\circ$

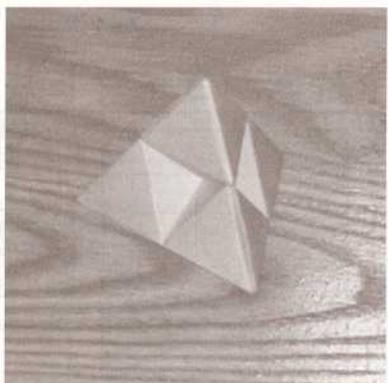
用紙 /rectangular 6 : 14



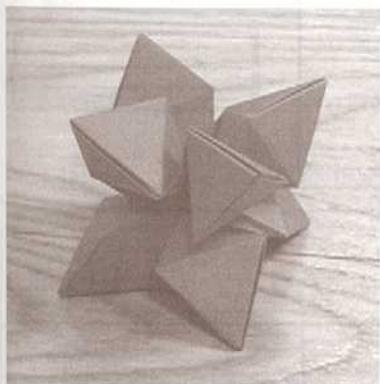
$\theta = 60^\circ$
用紙 /rectangular 6 : 12



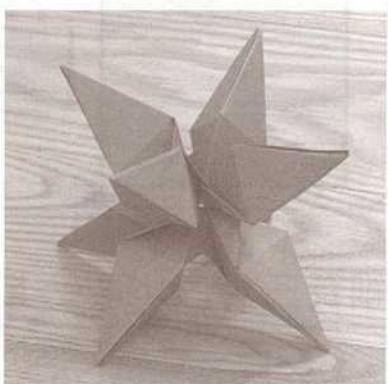
$\theta = 60^\circ$
用紙 /rectangular 6 : 10



$\theta = 60^\circ$
用紙 /rectangular 6 : 8.2



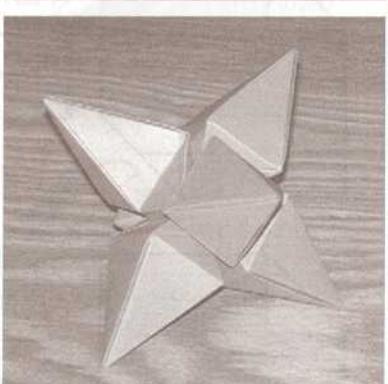
12枚組 /12units
 $\theta = 60^\circ$
用紙 /rectangular 6 : 9.8



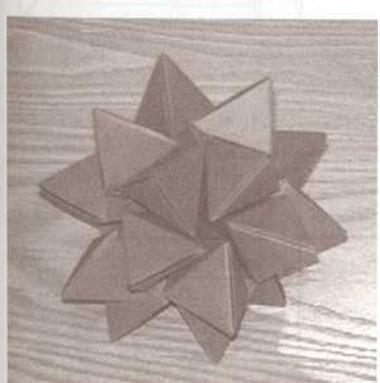
12枚組 /12units
 $\theta = 36^\circ$
用紙 /rectangular 6 : 14.5



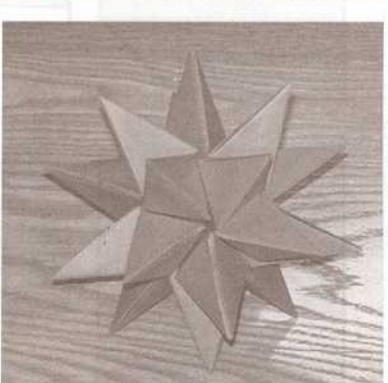
12枚組 /12units
 $\theta = 60^\circ$
用紙 /rectangular 6 : 9.8



12枚組 /12units
 $\theta = 36^\circ$
用紙 /rectangular 6 : 14



30枚組 /30units
 $\theta = 60^\circ$
用紙 /rectangular 6 : 11

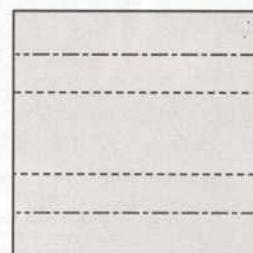


30枚組 /30units
 $\theta = 36^\circ$
用紙 /rectangular 6 : 14

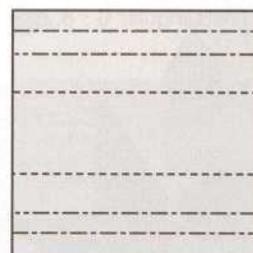
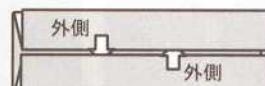
1/3のおび

山田 勝久

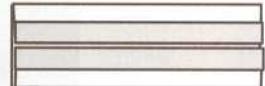
片面ジョイント共通2種



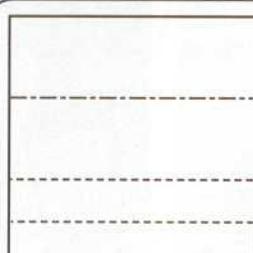
片面Aジョイント



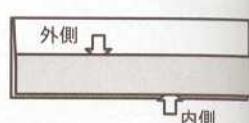
片面Bジョイント



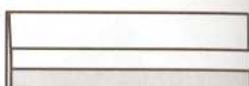
両面ジョイント共通2種



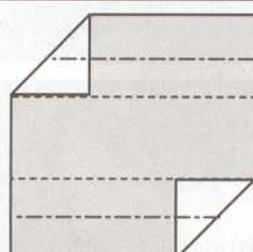
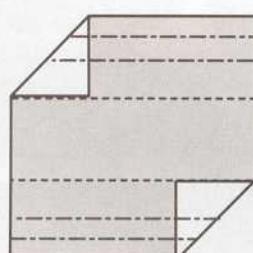
両面Aジョイント



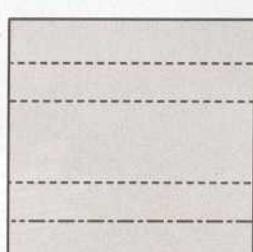
両面Bジョイント



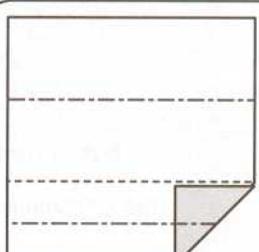
細長三角形ユニット用3種

だいたい正三角形ユニット可
片面A-2ジョイント

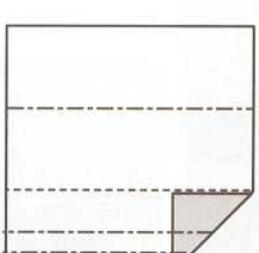
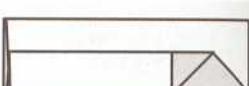
片面B-2ジョイント

片面Aの変形
ジョイント

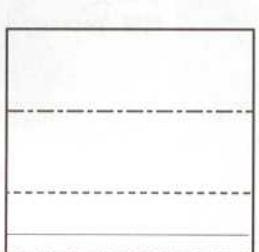
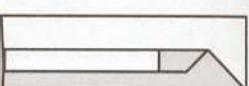
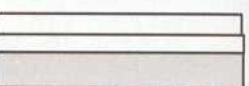
12枚キューブユニット用3種



両面A-2ジョイント



両面B-2ジョイント

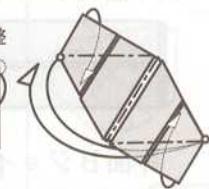
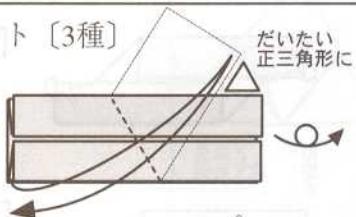
両面Bの変形
ジョイント

1/3のおびユニット

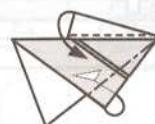
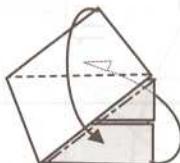
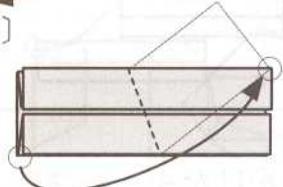
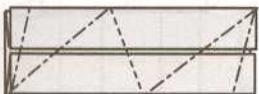
山田 勝久

片面ジョイント [片面共通2種 細長三角形ユニット用3種]

だいたい正三角形ユニット [3種]



細長三角形ユニット [5種]

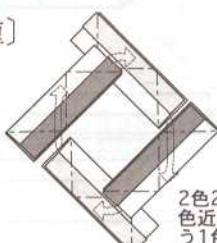
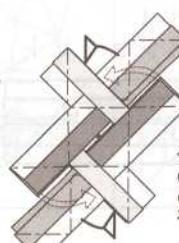


両面ジョイント [両面共通2種 12枚キューブユニット用3種]

12枚キューブユニット [5種]



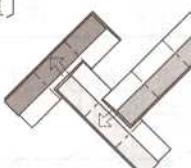
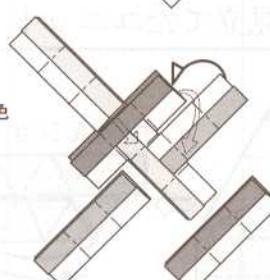
3色×4枚組

2色2枚づつ
色近づけても
う1色は離す色つきのおび
のカドに3色
めのおびを入
れる

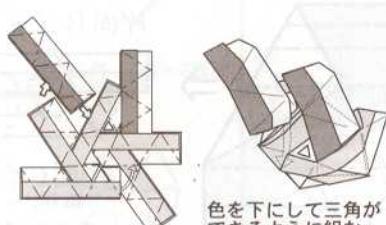
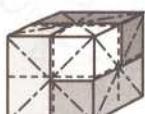
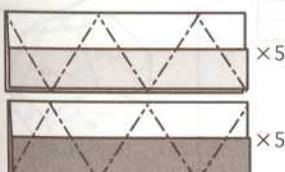
6枚キューブユニット [2種]



3色×2枚組

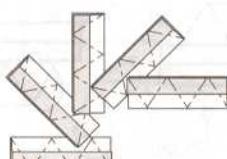
3色のおびの色
を外にして組
む同じ色のおび
で色をずらし
て組む

6枚キューブ星ユニット [2種]

6枚キューブ
ユニットに
組みおりす
じをかえる色を下にして三角が
できるように組むだいたい正三角形の
10枚組20面体ユニット [2種]

×5

×5



同じ形のおびの色を外にして5枚組む

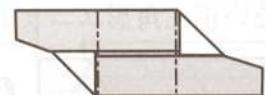
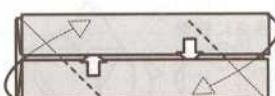
布施知子さんの20面体10枚組1/3の作品正三角が4個つながった帯のユニット
でしたので、だいたい正三角形のユニットで組んでみました。

1/3のおびユニットの仲間

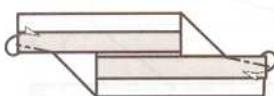
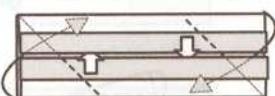
山田 勝久

そのべ風キューブユニット [2種]

片面Aジョイント

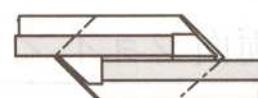
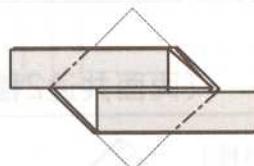
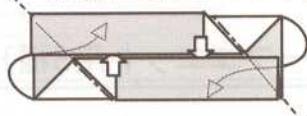


片面Bジョイント

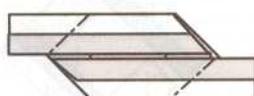
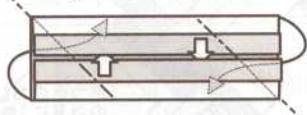


カドのかけたキューブユニット [3種]

片面A-2ジョイント左右逆

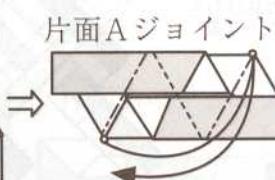
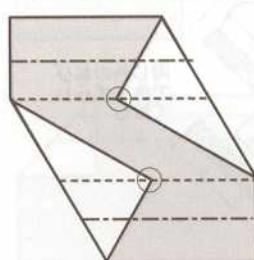
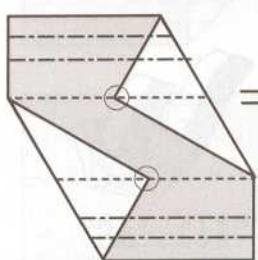
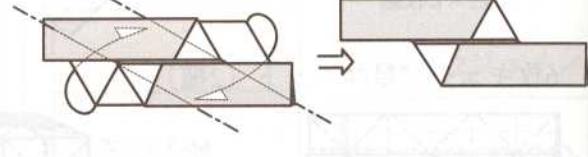
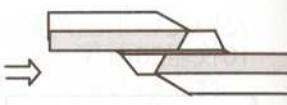
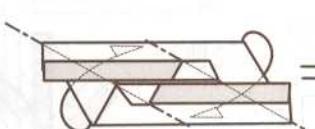
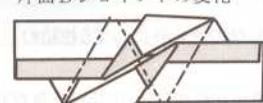


片面Bジョイント



正三角形に見立てたユニット [3種]

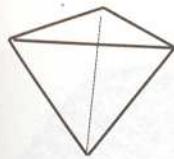
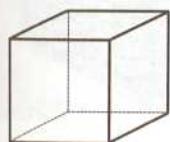
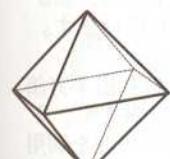
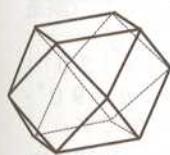
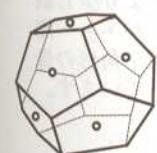
あみ込み風ユニット [2種]

正三角形に見立てた
ユニット片面Cジョイント
片面Bジョイントの変化

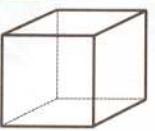
1/3のおびユニットのおもな組み合わせ

山田 勝久

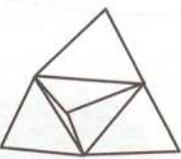
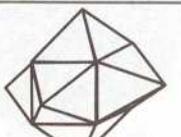
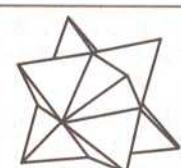
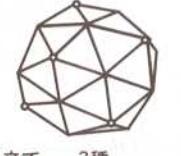
ベースになる多面体

正4面体
正3角形×4立方体
正方形×6正8面体
正3角形×8立方8面体
正方角形×6
+ 正3角形×8正20面体
正3角形×20正12面体
正5角形×12

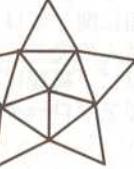
キューブのユニット

そのべ風
2種×6枚
12枚キューブ5種×12枚
6枚キューブ2種×6枚
合計
 $6+1-7=6+1-7$ 星2種そのべ風
2種×12枚
12枚キューブ5種×24枚
6枚キューブ2種×12枚
合計
9種そのべ風
2種×30枚
12枚キューブ5種×60枚
6枚キューブ2種×30枚
合計
9種そのべ風
2種×30枚
12枚キューブ5種×60枚
6枚キューブ2種×30枚
合計
9種そのべ風
2種×30枚
12枚キューブ5種×60枚
6枚キューブ2種×30枚
合計
9種

三角形のユニット

見立て
細長三角
だいたい
合計
3種
5種
3種
11種 ×6枚見立て
細長三角
だいたい
合計
3種
5種
3種
11種 ×12枚
あみ込み風2種 ×12枚見立て
細長三角
だいたい
合計
3種
5種
3種
11種 ×12枚見立て
細長三角
だいたい
合計
3種
5種
3種
11種 ×24枚見立て
細長三角
だいたい
合計
3種
5種
3種
11種 ×30枚見立て
細長三角
だいたい
合計
3種
5種
3種
11種 ×30枚
あみ込み風2種 ×30枚

三角形ユニット

見立て
だいたい
合計
3種
3種
6種 ×5枚見立て
だいたい
合計
3種
3種
6種 ×10枚見立て
だいたい
合計
3種
3種
6種 ×15枚

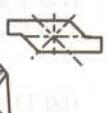
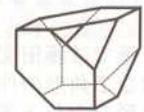
細長三角形ユニット



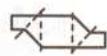
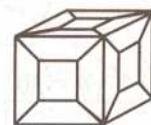
細長三角 5種×6枚

カドのかけた
キューブユニット [3種]

6枚組



12枚組

だいたい正三角形の
10枚組20面体ユニット [2種]

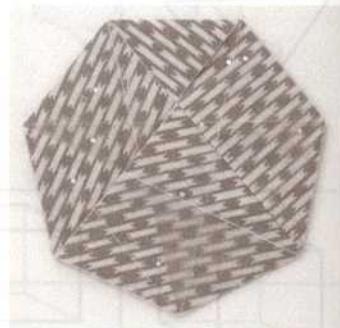
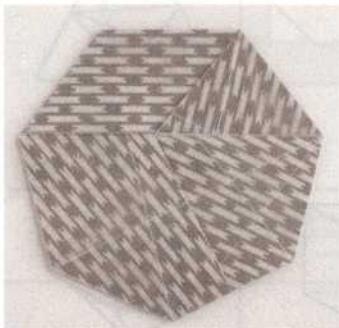
5+5枚

7角形の畳紙 I, II

創作／作図
霞誠志

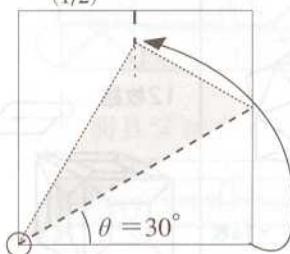
By Kasumi

折り紙では藤田文章氏の方法により正確な7角形の作図が可能です。7角形を含む正多角形の作図法についてはロベルト・ゲレト・シュレーガー著『折り紙の数学』(※.1)でも詳しく解説されています。こうした数理的な方面に関しては、私の出る幕はありませんので・・・ここでは～比較的簡単に・綺麗に折れる手順を探す方向でアプローチしてみたいと思います。

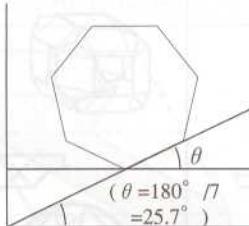


(図.1)

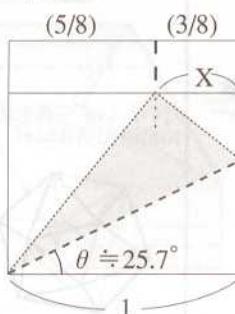
(1/2)



(図.2)



(図.3)



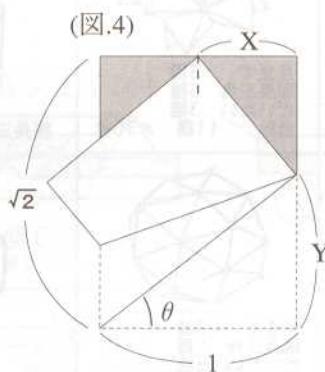
<角の等分割について>

多角形を折るには必要な角度を得る必要が出てきますので、私が使っている角の等分割方法をいくつか紹介したいと思います。

(1) 良く知られている(図.1)のような 30° を折り出す方法を応用すると、角の7等分や9等分が比較的簡単に出来ます。まず、7角形を折るために(図.2) $\theta = 180^\circ / 7$ の角度を利用するには(図.3)のように規準となる折筋を $X = 3/8$ にする事で $\theta = 90^\circ \times 2/7$ の近似値を得ることが出来ます。この折り方だと誤差は、角度にして -0.06° となります。

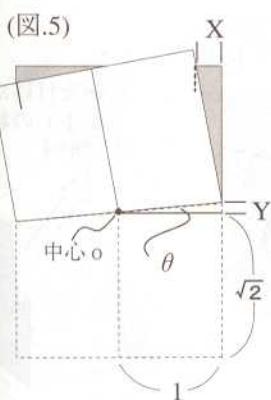
また $X = 7/9$ になると $\theta = 90^\circ \times 3/7 \approx 38.6^\circ$ (誤差は $+0.01^\circ$) を得ます。

(2) $X = 15/64$ では9等分 ($\theta = 90^\circ \times 2/9 = 20^\circ$ (誤差は $+0.02^\circ$))、 $X = 6/7$ では11等分 ($\theta = 90^\circ \times 5/11 \approx 40.9^\circ$ (誤差は -0.02°)) が可能です。<ここで辺を7等分、9等分するにはどうしたら良いのか分からぬ方もいると思います。そんな方は辺や角の等分割について、ロバートラングさんが[ラング博士の役に立つ幾何学～比を折る](探偵団新聞55号～60号)の中で詳しく書かれていますので参考にしてみて下さい>



(3) (図.4)のようにして $X = 1/2$ として、芳賀第一定理折り(※.2)を $\sqrt{2}$ 長方形に対して行うと7等分 ($\theta = 90^\circ \times 3/7$ (誤差は -0.07°))を得ることができます。

このほうが $7/9$ 方法よりも少し誤差が大きいですが・・・簡単に7等分出来るので7角形の畳紙Iではこちらを使っています。



(4)これまでの2つの方法と違って用紙の中心から分割するには(図.5)のようにして中心点を通り、Xに辺を揃えるように折ると1/5等分や1/7等分も出来ます。X=1/4になると拙作の1/7角形の畳紙に使った1/7等分(正確には3/4等分ですが)が出来ます。この場合の誤差は-0.07°です。

※参考：(誤差の計算に使用した：図3～5のXとYの関係式)

$$\tan \theta = Y$$

$$(図.3) Y = \sqrt{\frac{X}{2-X}} \quad (図.4) Y = \frac{2+X^2}{2\sqrt{2}}$$

$$(図.5) Y = \frac{X}{\sqrt{2} + \sqrt{(1-X^2)+1}}$$

#####

<参考文献>

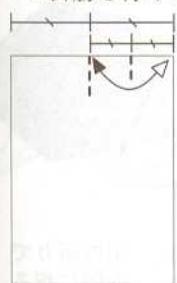
※.1 ロベルト・ケレトシャレガー著、深川英俊訳『折り紙の数学』(森北出版2002年)

※.2 芳賀和夫著『オガミクスI(幾何图形折り紙)』(日本評論社1999年)

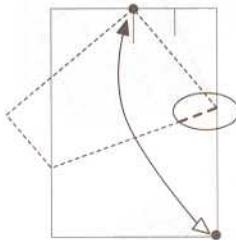
※.3 伏見康治編著『創造性の文化と科学』(共立出版1989年)

7角形畳紙 I < $\sqrt{2}$ 長方形から>

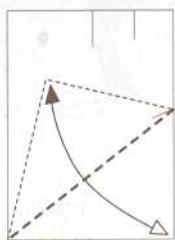
1. $1/2$ と $1/4$ の折筋を付ける



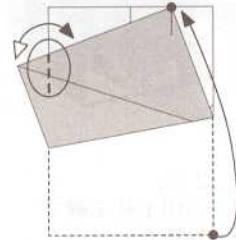
2. ○印の部分にだけ折筋を付ける



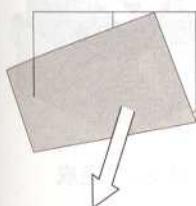
3. 付けた印とカドを結ぶ線で折筋を付ける



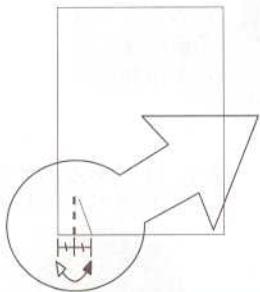
4. ○印の部分(交点)にだけ折筋を付ける



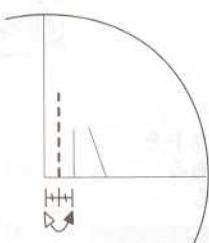
5. 元に戻す



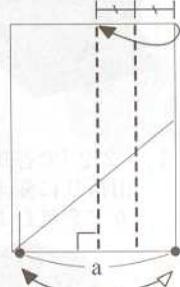
6. $1/2$ の折筋を付ける



7. さらに $1/2$ の折筋を付ける



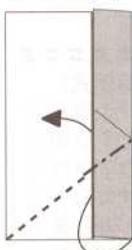
8. つけた折筋に合わせて折る



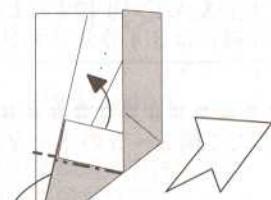
※8. 「a」の幅が完成形の精度に影響します。
紙の質や厚みにより微調整して下さい。

「7」で付けた折筋に合わせて折筋を付ける

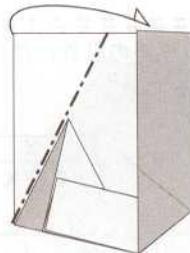
9.
既にある折筋
で中割折り



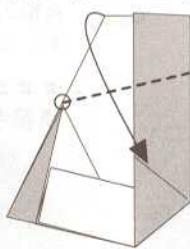
10.
中割折り



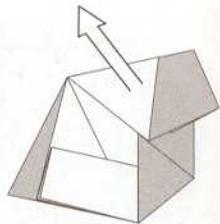
11.
手前の辺に揃う
ように折る



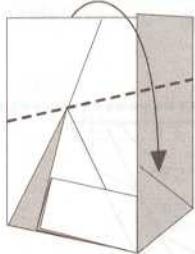
12.
○印を基点にカドを
折筋に合わせて折る



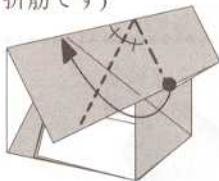
13.
折筋を付けたら
「1 1」の状態
まで戻す



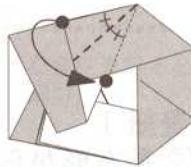
14. 折筋を延長して
折る



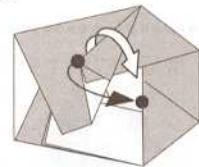
15.
●印を縁に合わせる
ように折る
(山折り線は既にある
折筋です)



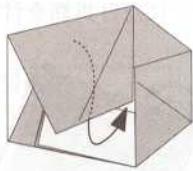
16.
●印を合わせる
ように折る



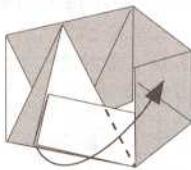
17.
下の紙を引き出して
上下を入れ替えながら
●印を合わせるように
折る



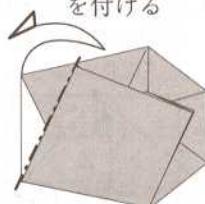
18. 下になっているカド
を手前に出す



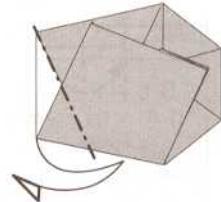
19. カドを反対側へ
たおす



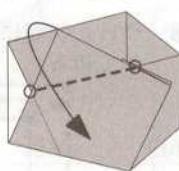
20. 縁にそって折筋
を付ける



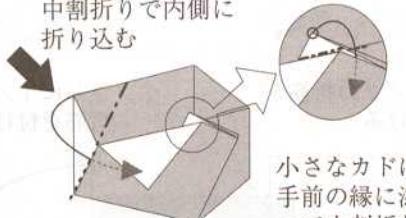
21. 縁にそって折筋
を付ける



22.
○印を結ぶ線で
谷折り

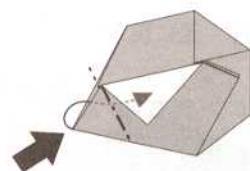


23.
中割折りで内側に
折り込む

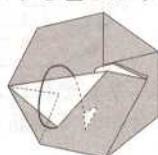


小さなカドは
手前の縁に添
って中割折り

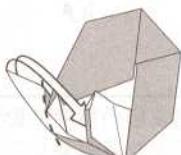
24. 中割折りで
内側に折る



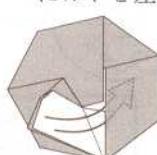
25. 「22」で谷折りしたカドを
山折りに変えて下にある
カドを包むように折る



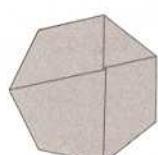
26. 途中図



27. 下にあるポケット
にカドを差し込む

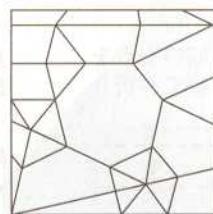


28. 完成

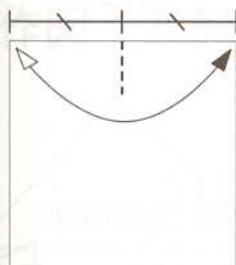




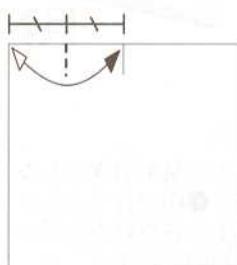
7角形の畳紙Ⅱ
<正方形から>



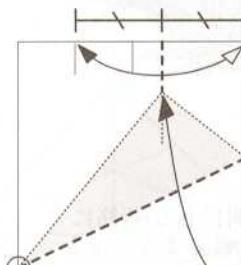
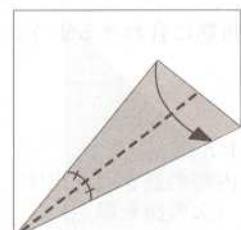
1. 折筋を付ける



2.

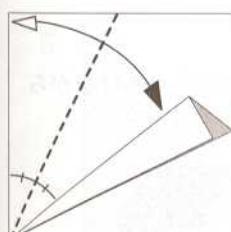
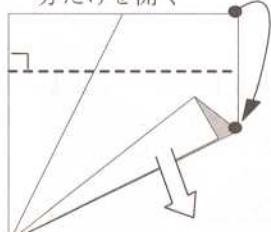
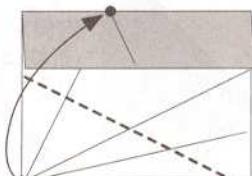
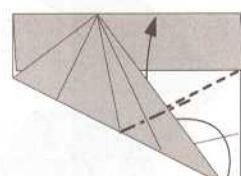
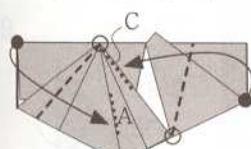


3.

4. 縁に合わせる
ように折る

○印を基点に付けた
折筋にカドが揃うよ
うに折る

5. 折筋を付ける

6. ●印を合わせるように
折ってから下の部分だけを開く7. ●印を合わせる
ように折る8. 「3」で付けた折筋
で中割折り9. ○印を基点にしてカドが
A、Cと合うように折る
(次の図を参照)

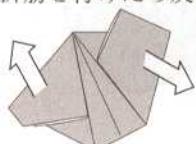
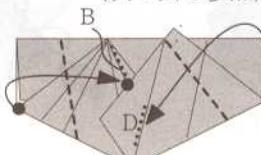
11. カドを反対側へたおす



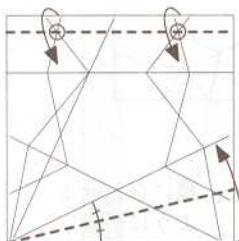
13. 一旦すべて開く



10. 折筋を付けたら戻す

12. B、Dの折筋に
合うように折る
(次の図を参照)

14. 折り筋の交点を
通る線で谷折り



折筋に合わせるように折る

15. 既にある折筋で折る

16. 「1,2」で折った
折筋で折る

17. 縁に合わせるように
折る

18. 内側の紙を引き出す
(次の図を参照)

19. (裏側にある)折筋に
合わせるように折る

20. 後ろの紙を引き出しながら
●印が合うように
折ると谷折線の位置が
自動的に決まる

21. 大きく中割り折り

22. ☆印の部分をひろげて
引き寄せるように折る

中割り折り

23. 内側が見えるように
(折筋は付けない)
かるくカドを立てる

24. ☆印の部分をひろげながら
aのカドを立てる

25. ☆印の部分で●印のカドを
包むようにして折りたたむ

26. 中割り折りでカドを
内側に折り込む

27. 下にあるポケットに
aのカドを差し込む

28. 完成

40

リス

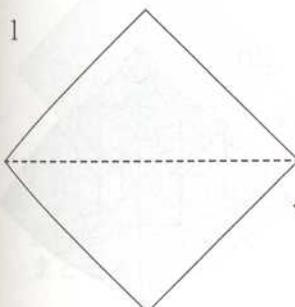
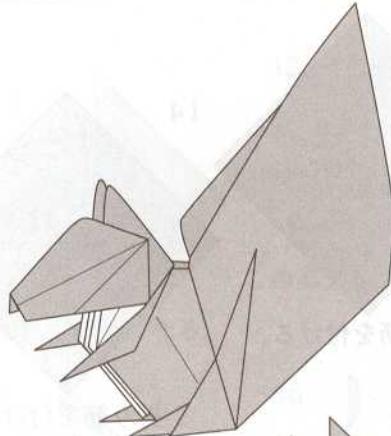
Squirrel

中川 幸治

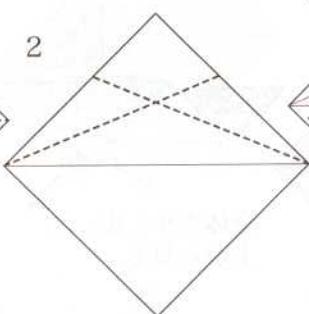
Kouji Nakagawa

創作：2003年 4月

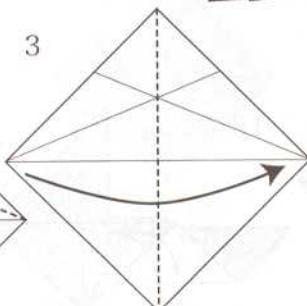
作図：2003年 4月



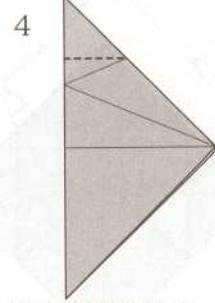
折り筋を付ける。



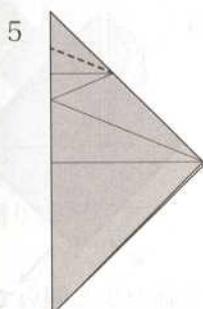
折り筋を付ける。



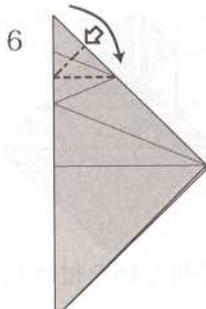
半分に折る。



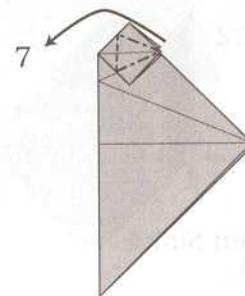
折り筋を付ける。



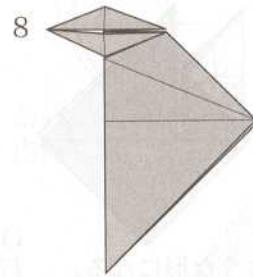
折り筋を付ける。



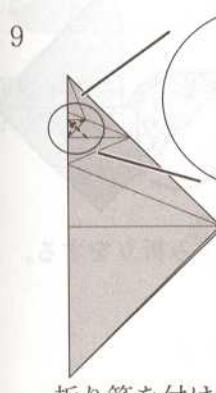
開いてつぶす。



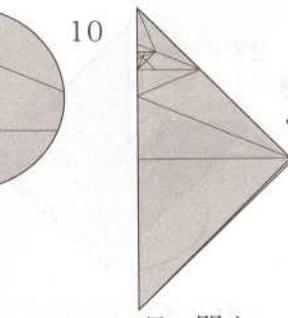
鶴の基本形を作る。



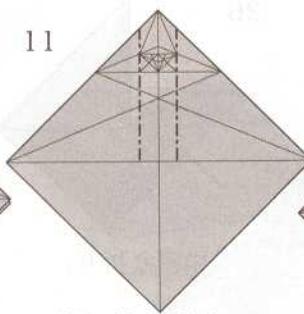
5の状態に戻す。



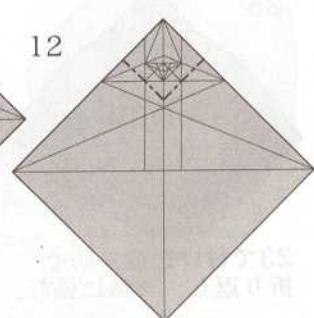
折り筋を付ける。



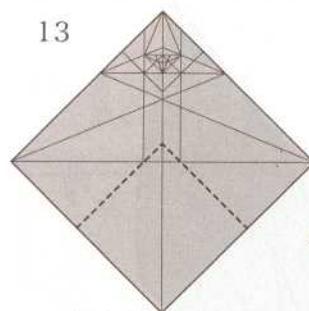
一旦、開く。



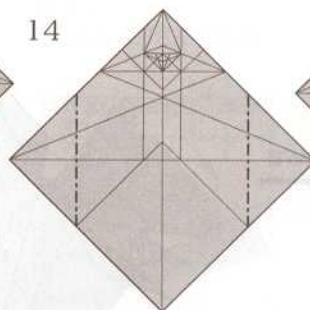
折り筋を付ける。



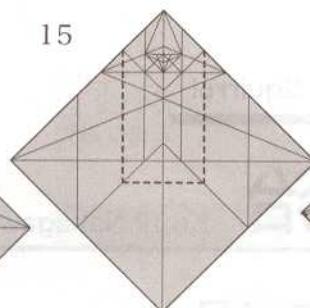
折り筋を付ける。



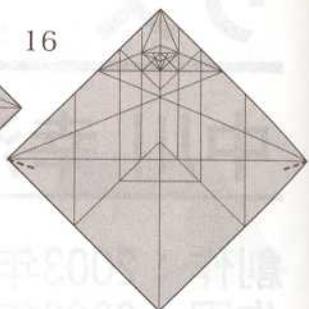
折り筋を付ける。



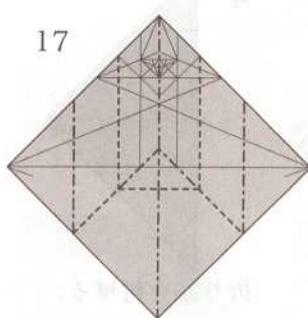
折り筋を付ける。



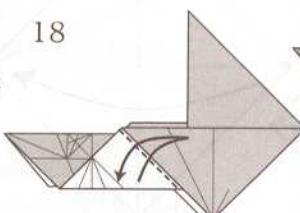
折り筋を付ける。



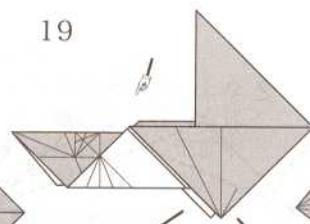
折り筋を付ける。



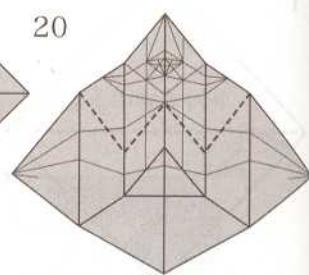
一気に折り畳む。



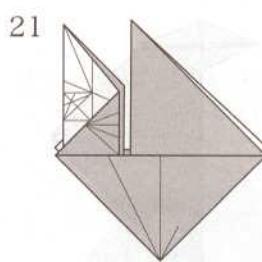
強く折り目を付ける。



全体を少し開いて
上から見る。



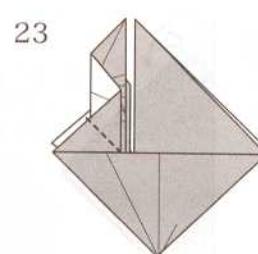
18で付けた折り筋で折り
返し、一気に畳む。



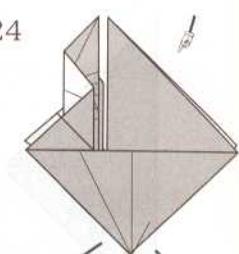
このような形になる。



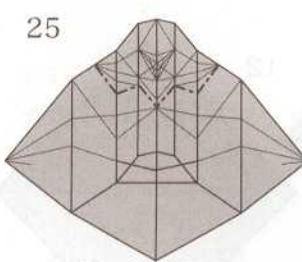
Open Sinkを
行う。



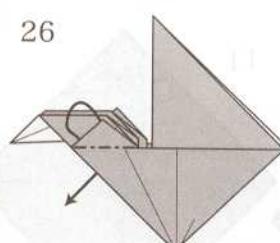
強く折り筋を付ける。



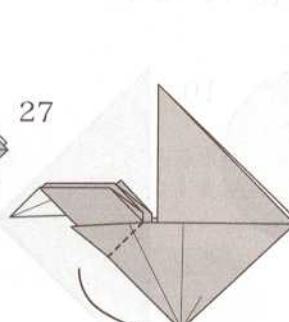
全体を少し開いて
上から見る



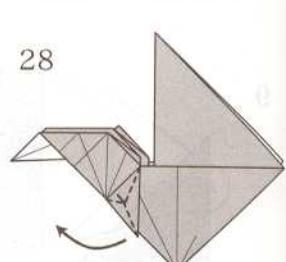
23で付けた折り筋で
折り返し、一気に畳む。



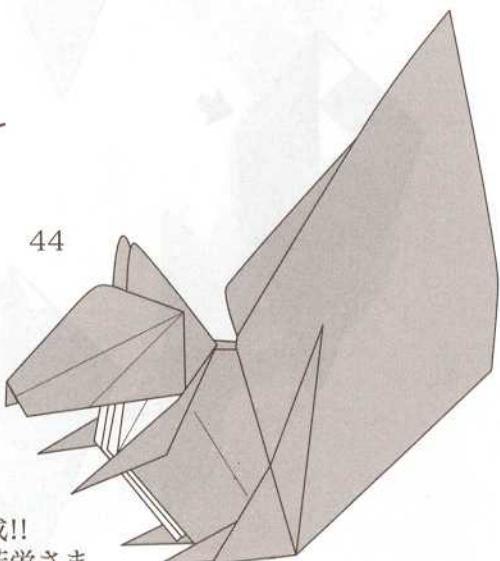
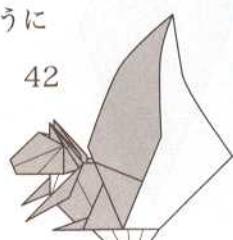
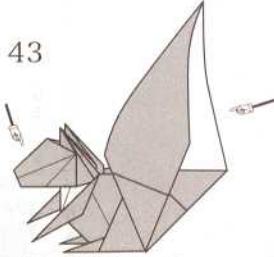
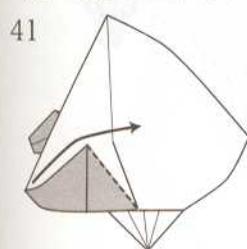
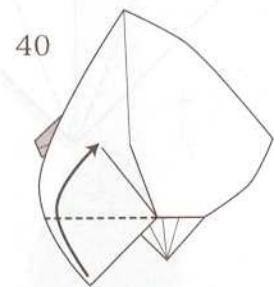
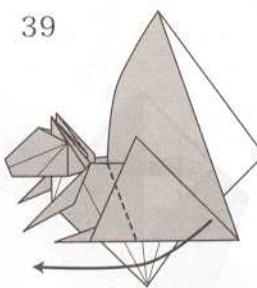
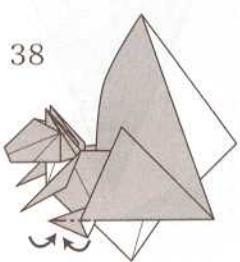
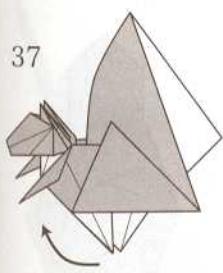
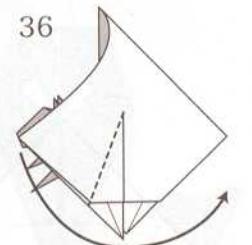
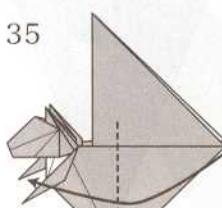
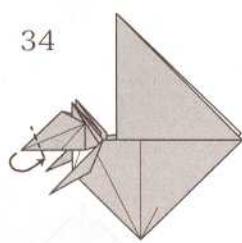
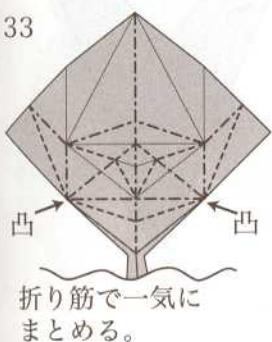
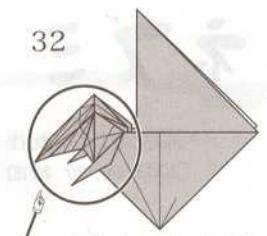
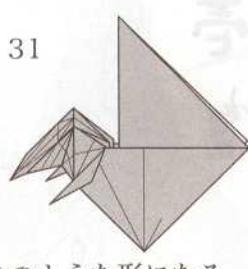
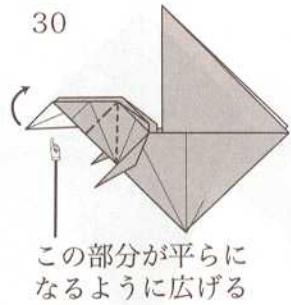
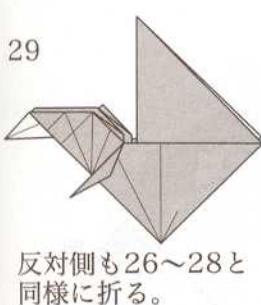
中割り折り。



つまみ折りをする。

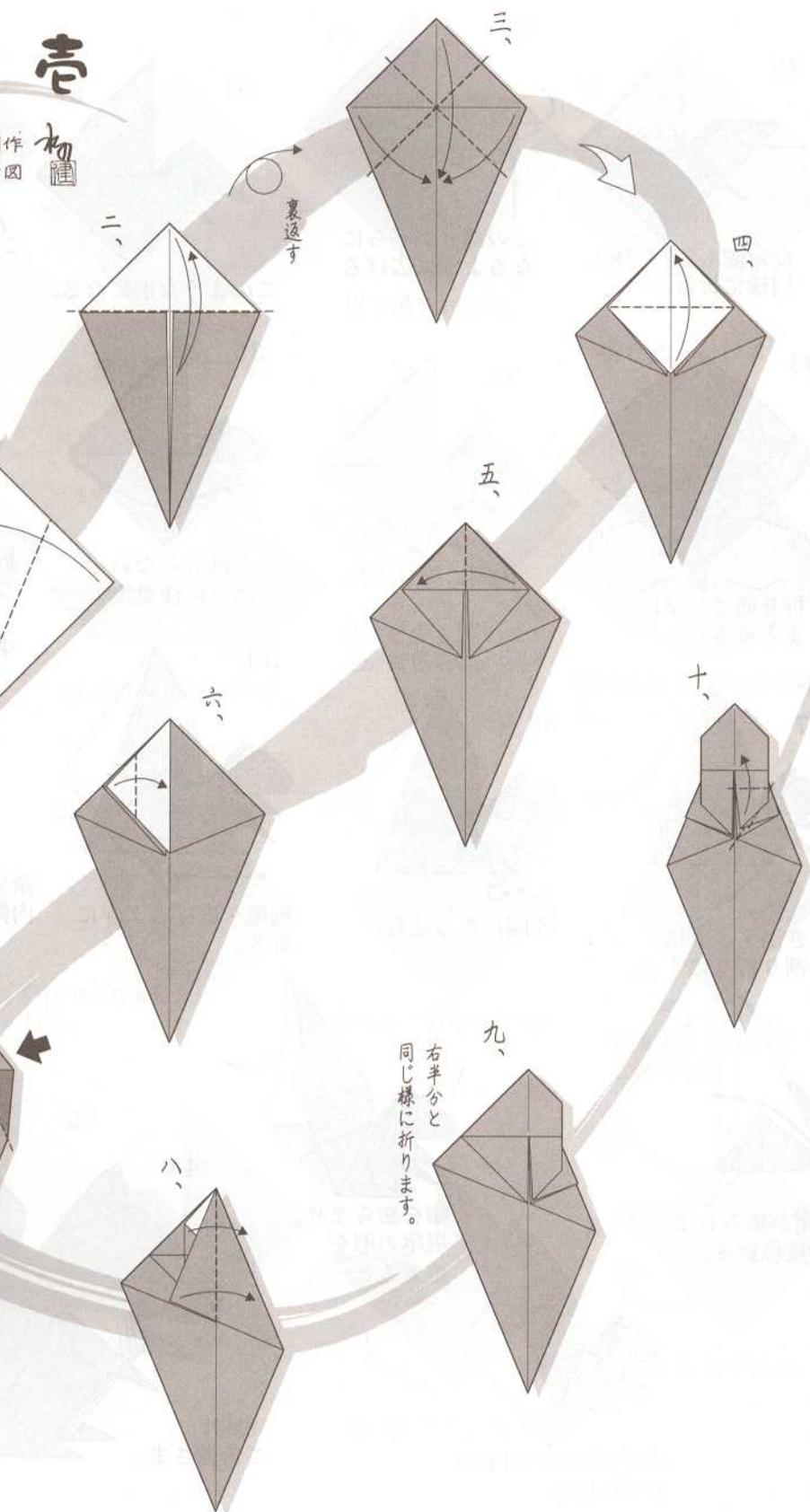


一杯の所で下に折り返す。

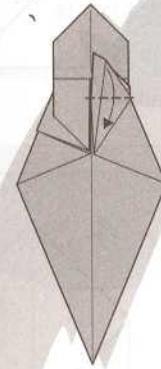
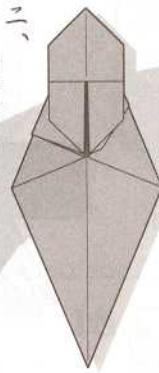


ネズミ 壱

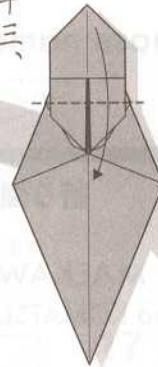
2002.02.11 創作
2003.06.30 折図



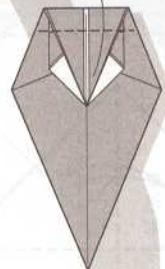
十一、

十二、右半分と
同じ様に折ります。

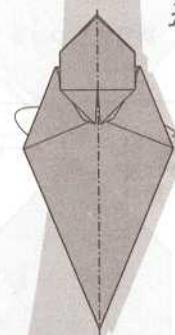
十三、



十四、

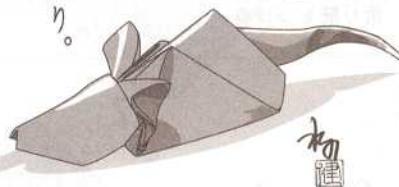


十五、

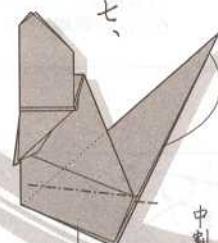
出来上がり。
尾尾を波打たせる様に
形作ります。

出来上がり。

十八、



十七、



中割り折り

十六、



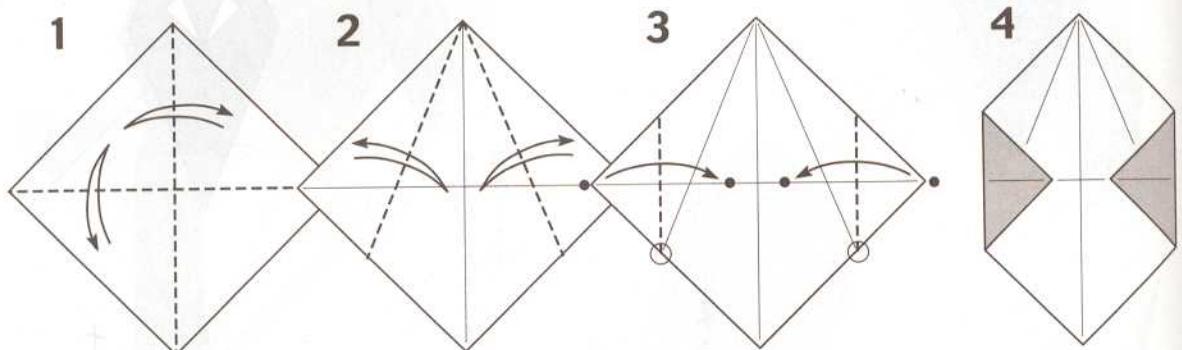
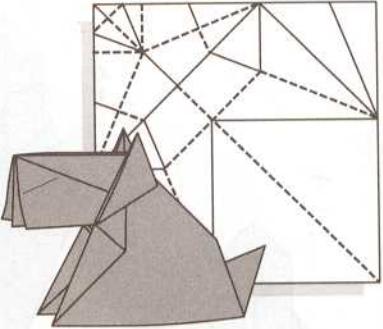
中割り折り

犬 (マック)

作／前川 淳

折り図／小松英夫

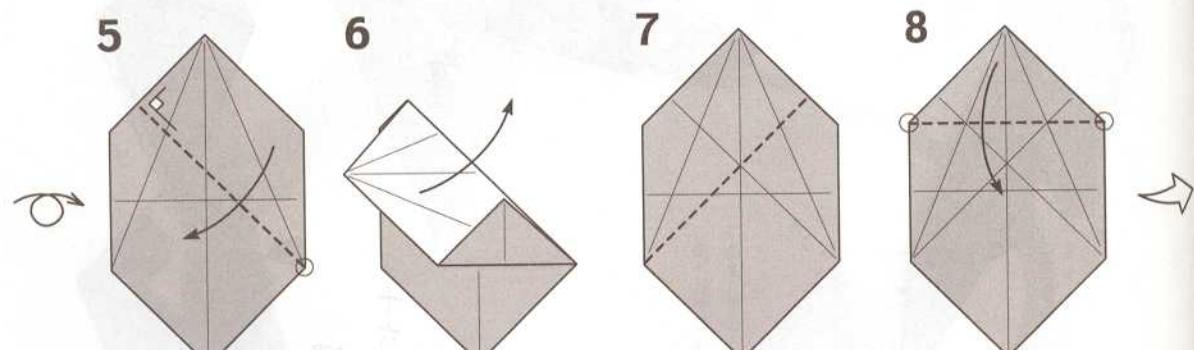
Model designed by Jun MAEKAWA
Diagrams produced by Hideo KOMATSU



折り筋をつける

中心線にあわせて
折り筋をつける

折り筋を目安に折る

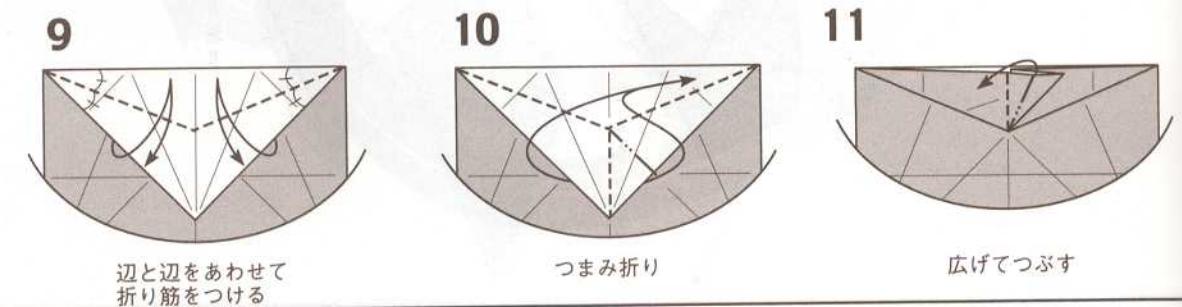


カドの
ところで折る

折り筋を
つけて戻す

反対側も
5~6と同様

カドのところで折る

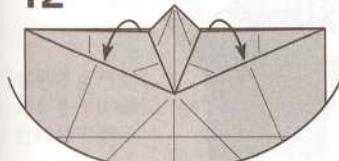


辺と辺をあわせて
折り筋をつける

つまみ折り

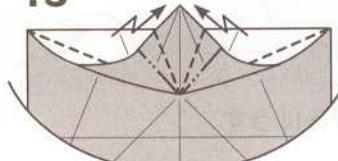
広げてつぶす

12



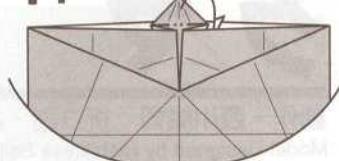
軽くひろげる

13



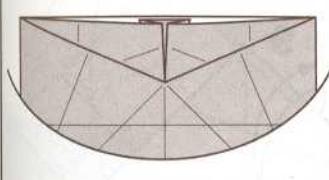
山谷を逆にして折り畳む

14

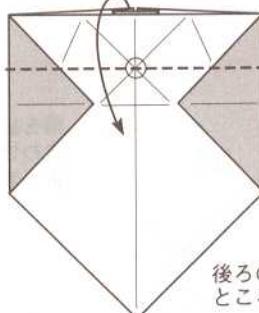


すぐ後ろのすきまに
折り込む

15

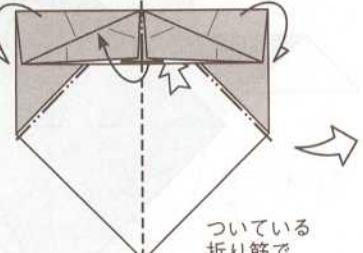


16



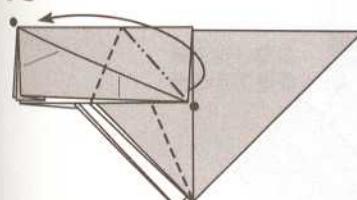
後ろのカドの
ところで折る

17



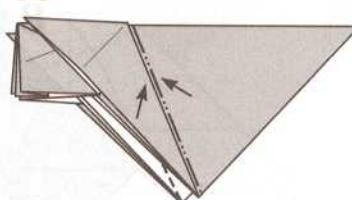
ついている
折り筋で
次の図のよう
にまとめる

18



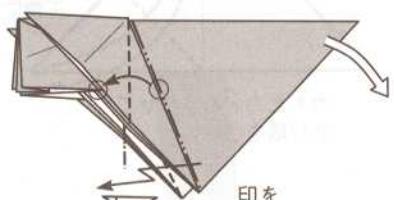
カドを
引き寄せて折る

19



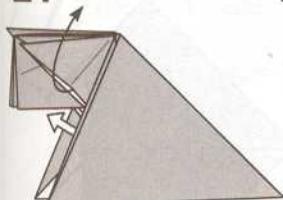
縁に沿って
折り目をつける

20



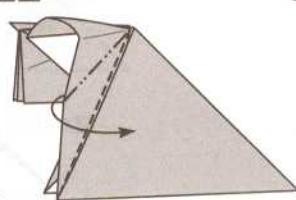
印を
あわせるように
両側で段折り

21



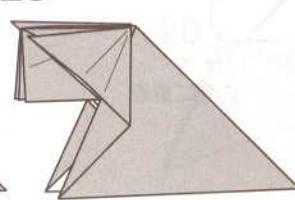
紙を1枚だけ
引き出す

22



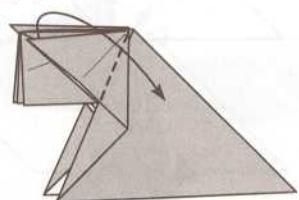
山谷を逆にして
折り畳む

23



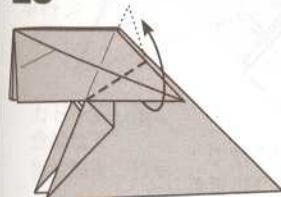
反対側も21~22と
同様に折る

24



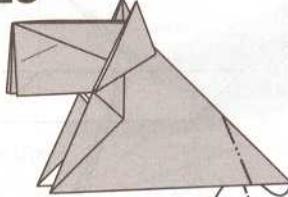
めいっぱいに折る
反対側も行う

25



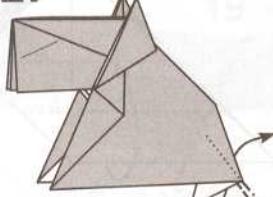
折り筋にあわせて折る
反対側も行う

26



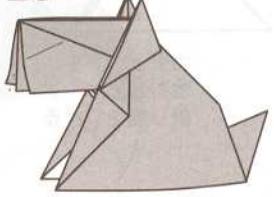
中割り折り

27



中割り折り

28

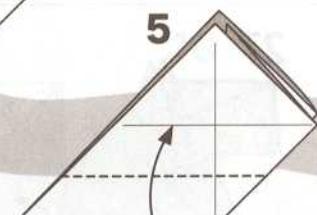
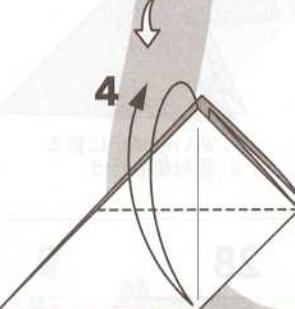
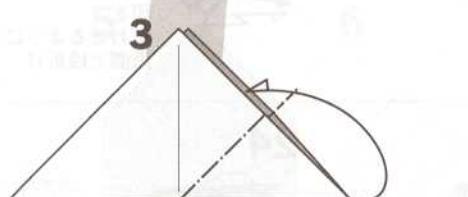
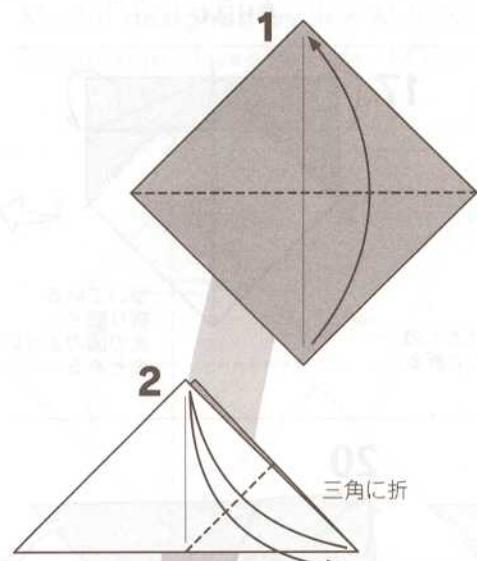
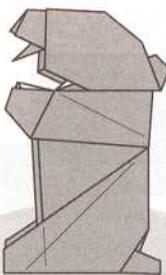


できあがり

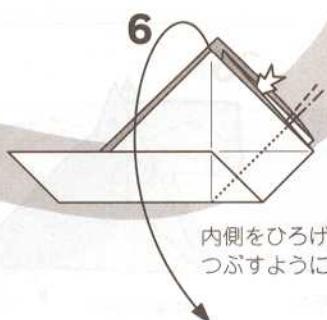
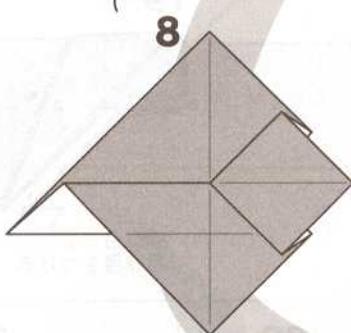
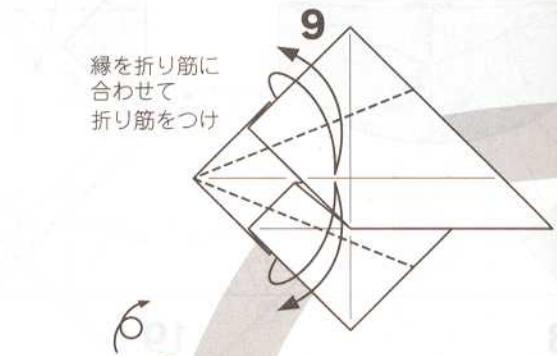
クマ

創作・西川誠司 折り図・おりがみはうす

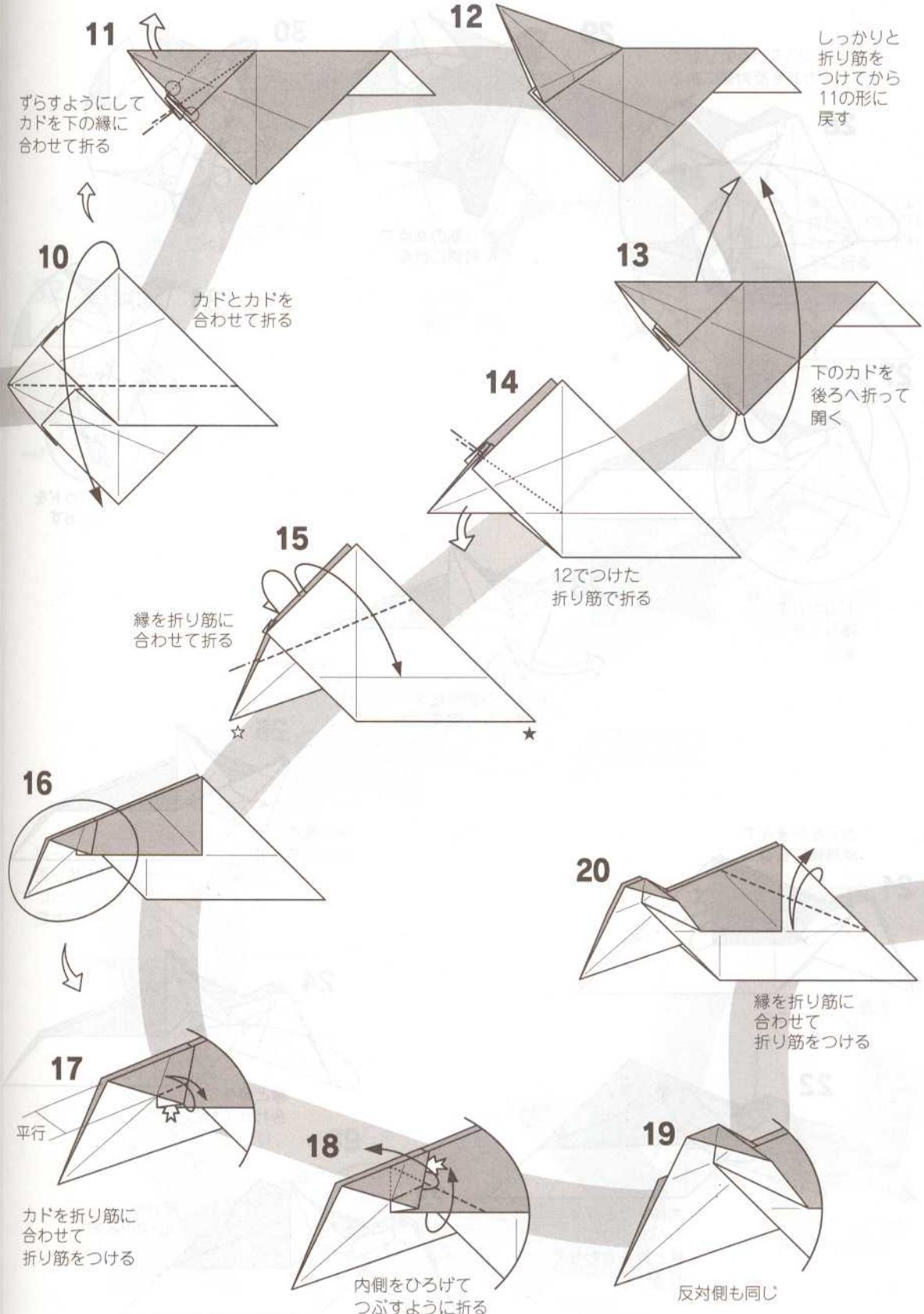
Model Designed by Nishikawa Seiji
Diagrams and Edited by ORIGAMIHOUSE



縁を折り筋に
合わせて折る



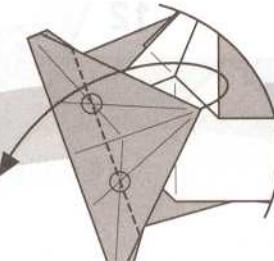
内側をひろげて
つぶすように折る



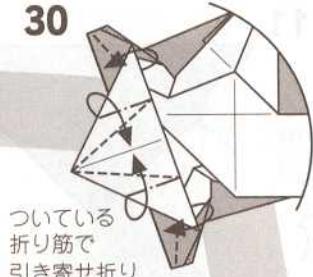
28

ついている折り筋で
カドを反対側に折る

29



30



27

下のカドを
後ろへ折って
開く

26

しっかり折り筋を
つけてから戻す

31

下のカドを
上に出す

21

カドをつまんで
反対側に折る

25

縁と縁を
合わせて折る

22

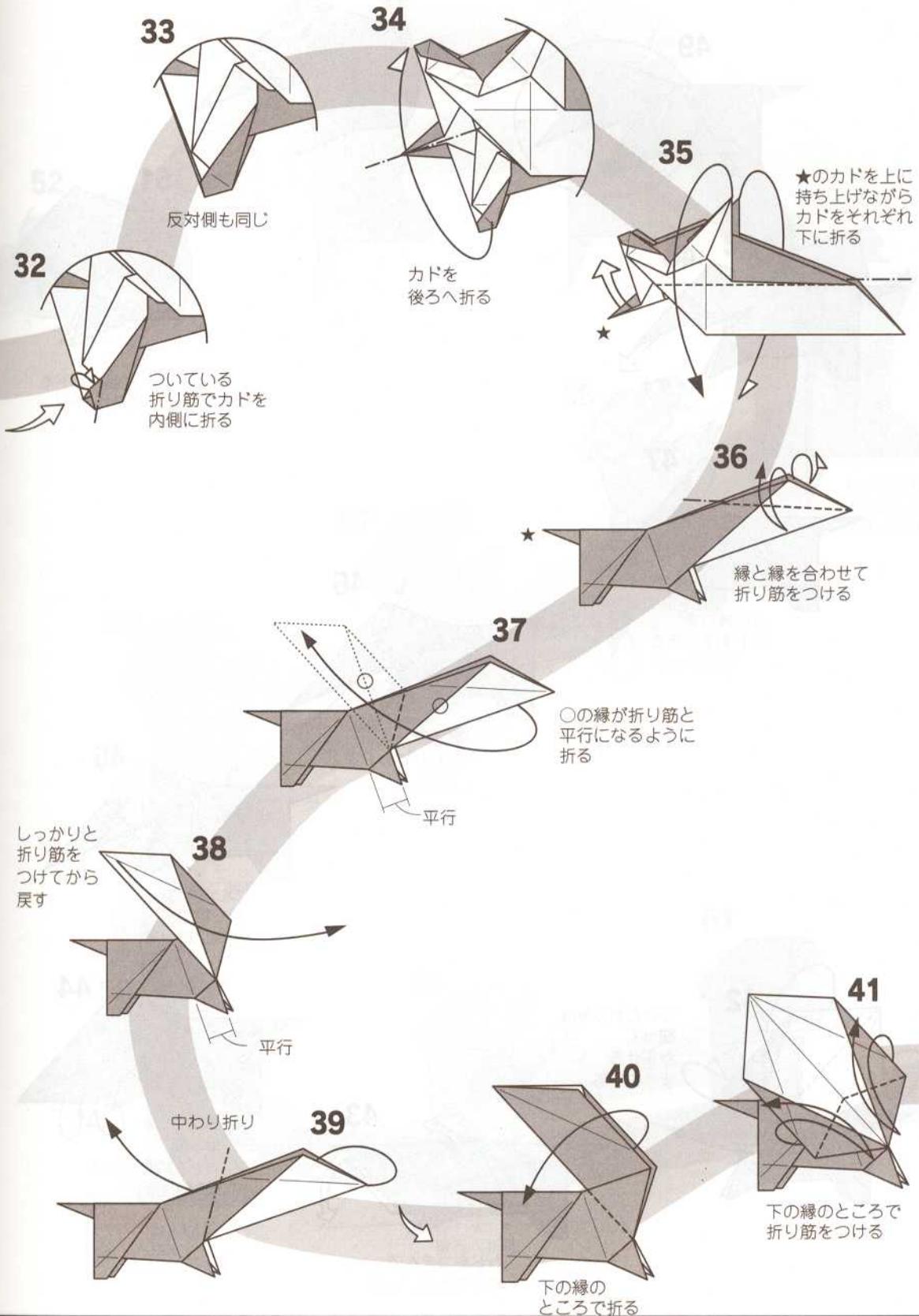
内側をひろげて
つぶすように
縁と縁を合わせて
折る

24

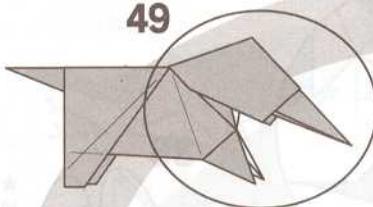
縁と縁を
合わせて折る

23

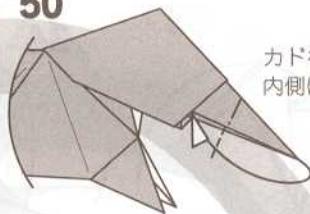
反対側も
20~22と同じ



49

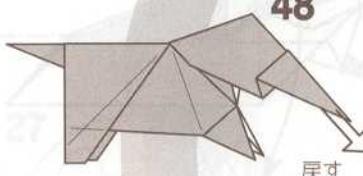


50



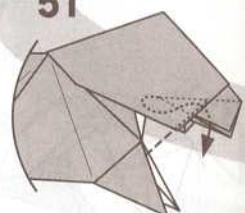
カドを
内側に折る

48



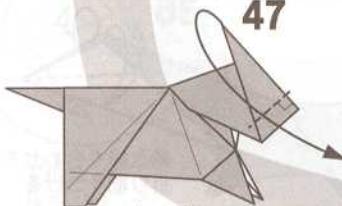
戻す

51



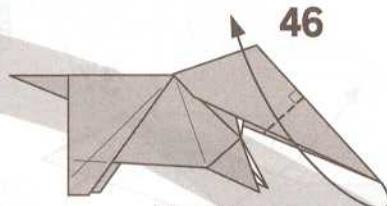
内側のカドを
中わり折り

47



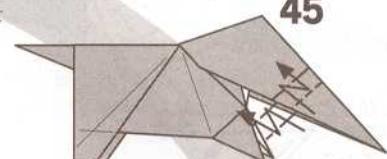
少し残して
カドを下に折る

46



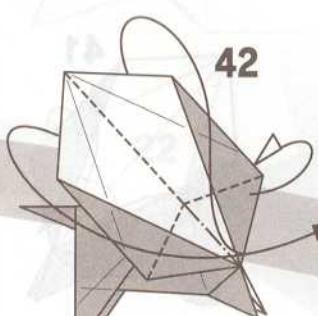
縁と縁を
合わせてカドを
上に折る

45



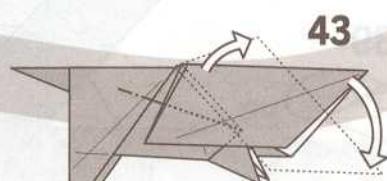
ついている
折り筋で
内側に段折り

42



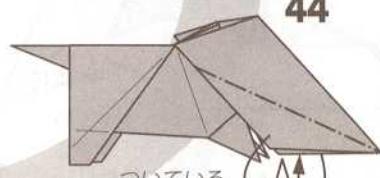
つけた折り筋を
使って
かぶせる
ように折る

43

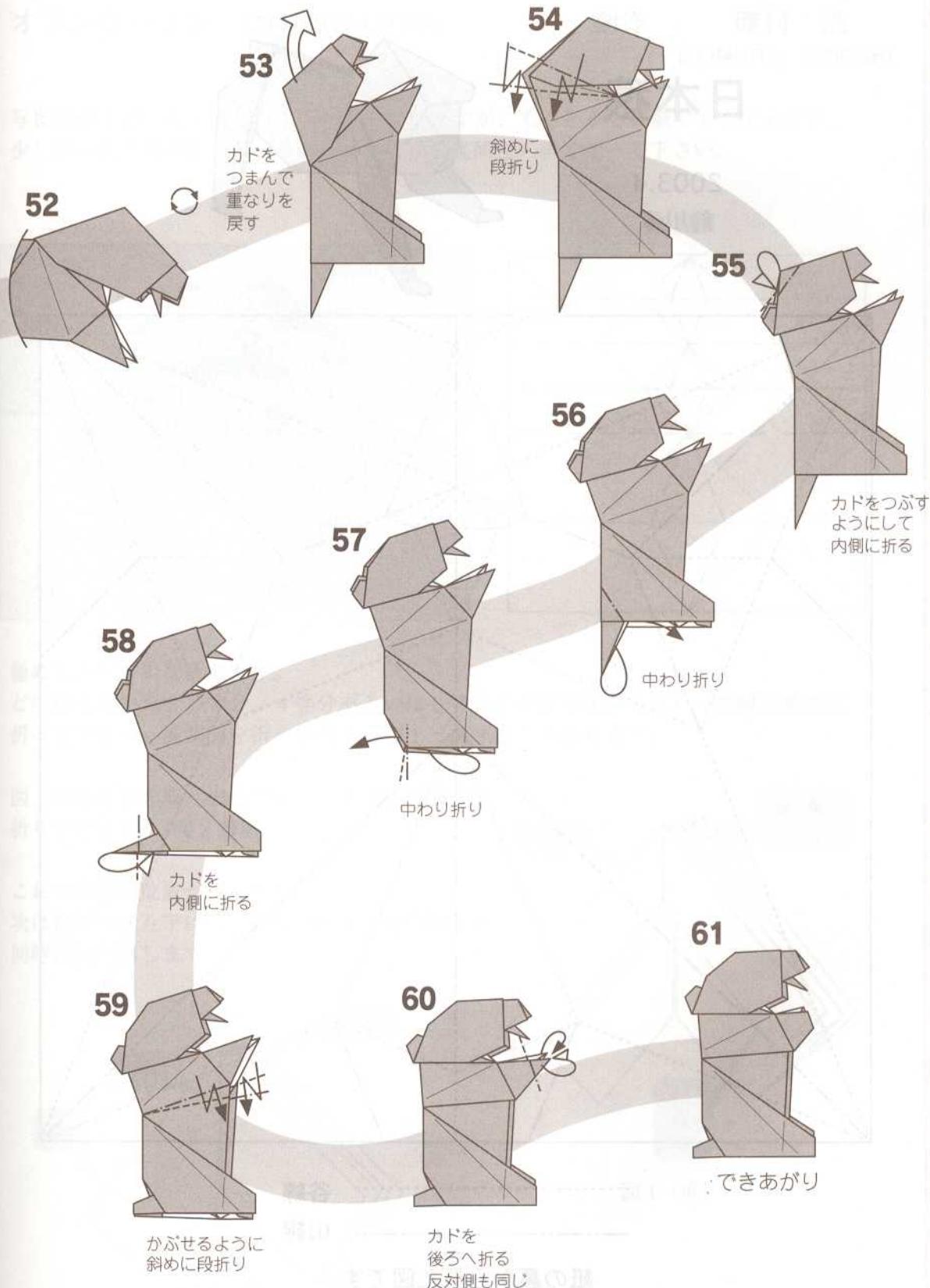


カドをつまんで
ずらすように折る

44



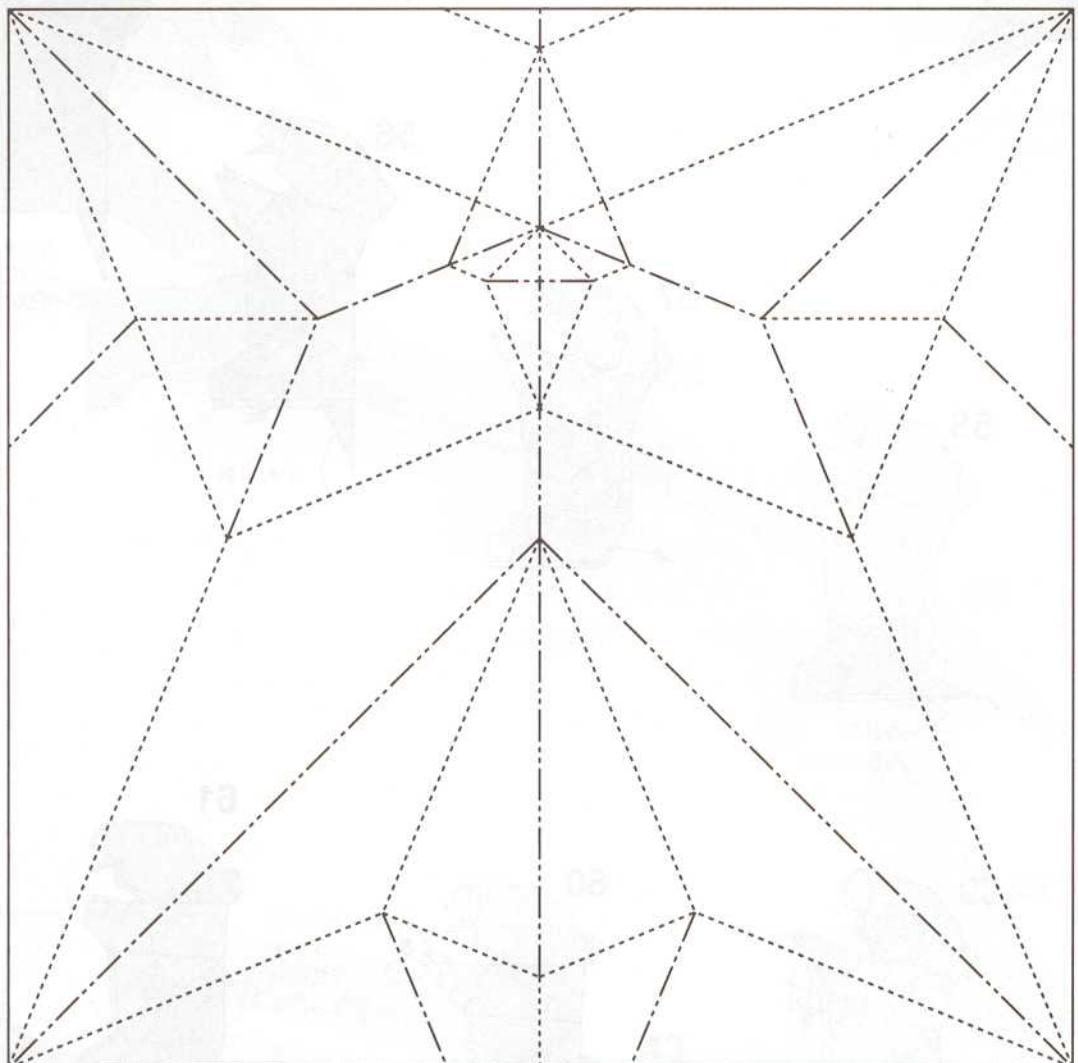
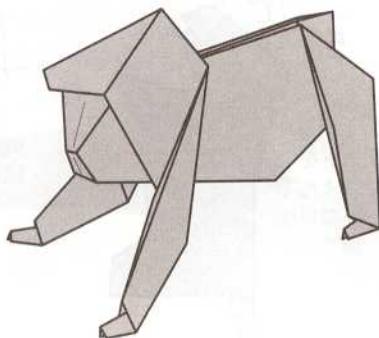
ついている
折り筋で
カドを内側に折る
反対側も同じ



日本猿

2003.4

前川淳



谷線

山線

紙の裏から見た図です。

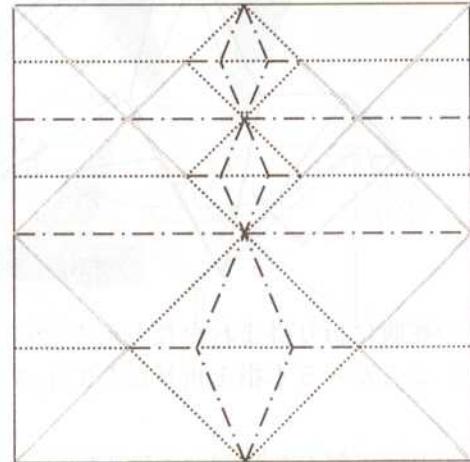
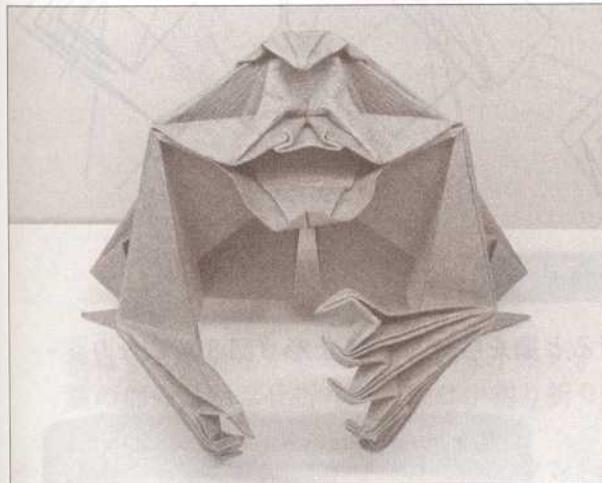
オランウータン ORANG-UTAN

創作 磯村 浩

ISOMURA HIROSHI

写真はB4から切り出した用紙を使っていますが、もっと小さい紙でも大丈夫です。少し厚い紙の方が感じが出ると思います。表裏同色の紙で折って下さい。

展開図



極めてシンプルな構造です。

どの線も辺や角を2等分、4等分あるいは8等分する線ですからグレーの線を基準に折って下さい。展開図を折りあげると図1（前・後）となります。

図1の基本形を取り出したら、まず下顎の部分を折り下げます。（図2参照）

これで両肩の位置が決まります。

次は臀部を折り下げて、足とお尻を中割り折りで同時に折り出します。

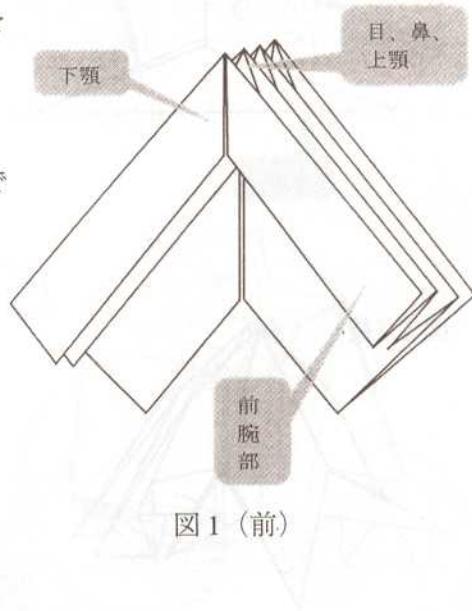
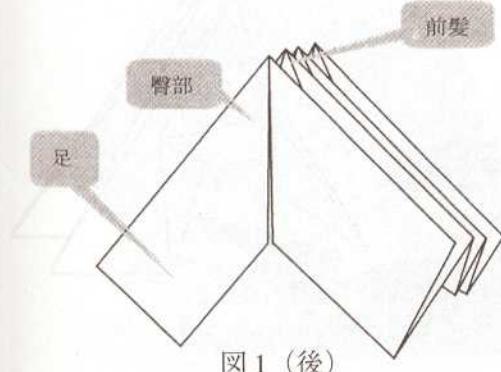
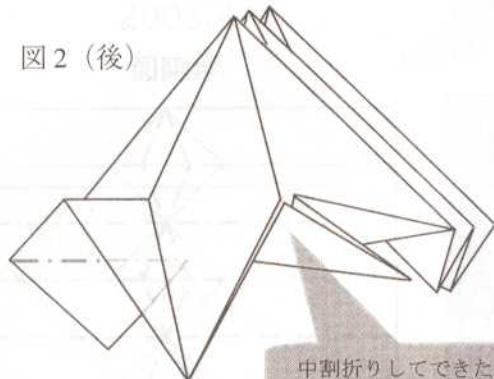


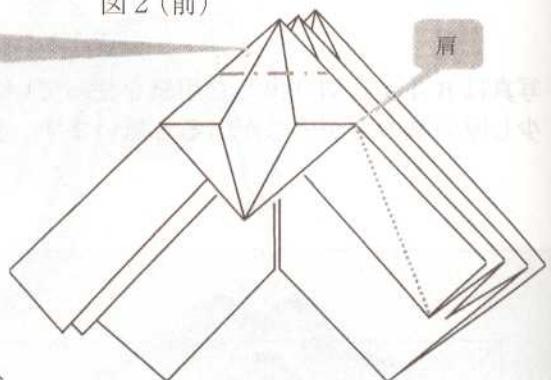
図1（前）

図2(後)



この部分を沈め折りして、顔を作ります。
(図5参照)

図2(前)



肩

中割折りしてできた足。

図2の蛇腹に折り畳まれた長方形を点線で折ると扇を広げたような形(図3)になります。ここから5本指を折りだして下さい。

図3(肩から先だけの拡大図)

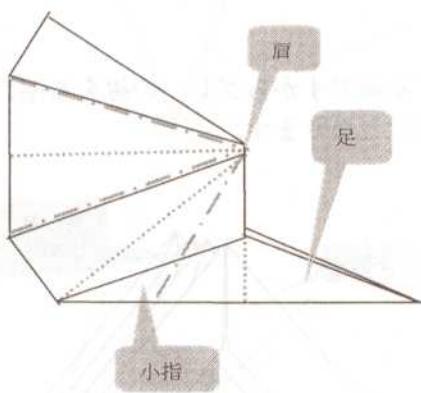


図3をグレーの線で折りたたむとこんな感じになります。肩の支点が離れているのは気にしないでください。

図4(前)

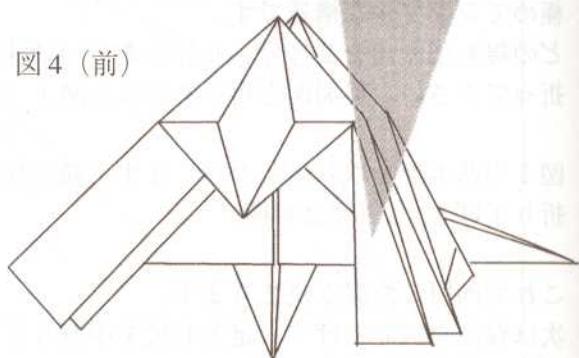
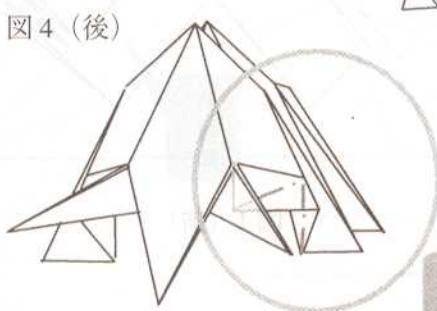


図4(後)



右足

この線にあわせて中割折りを繰り返して指をつくる。

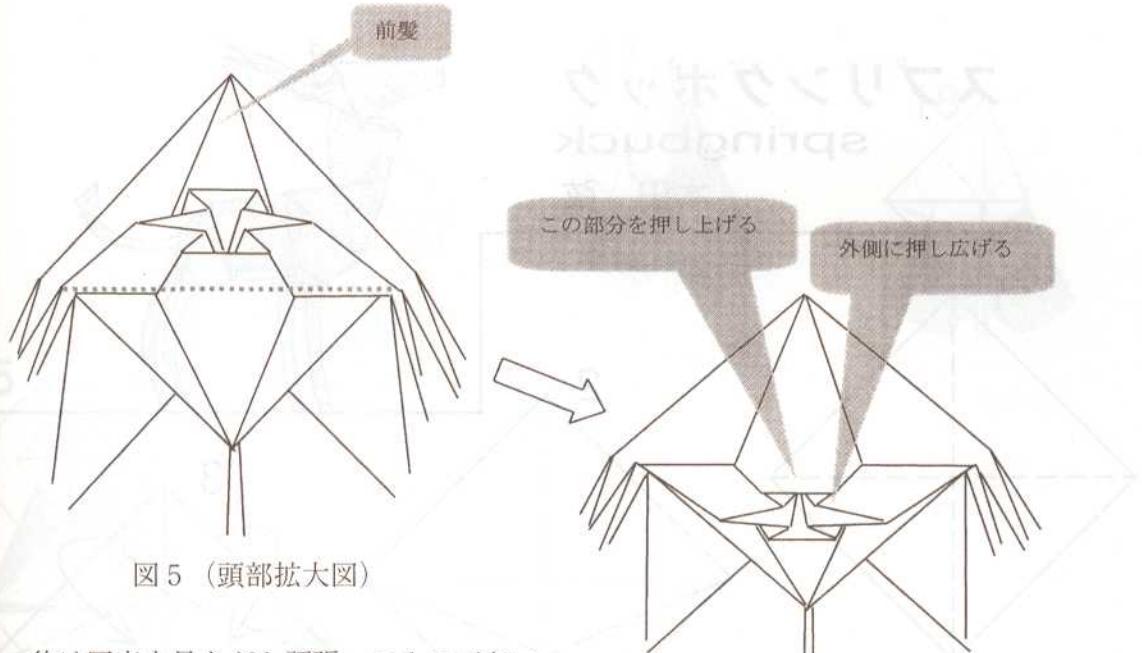


図5（頭部拡大図）

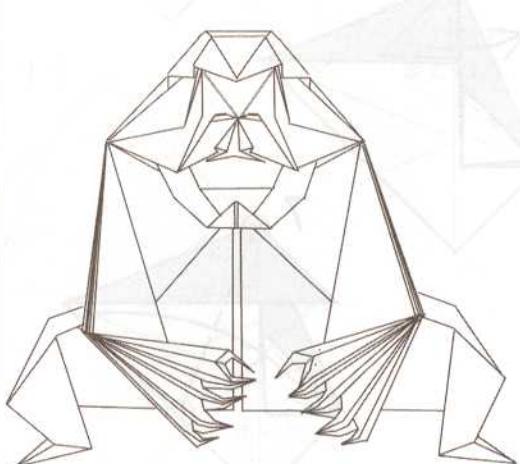
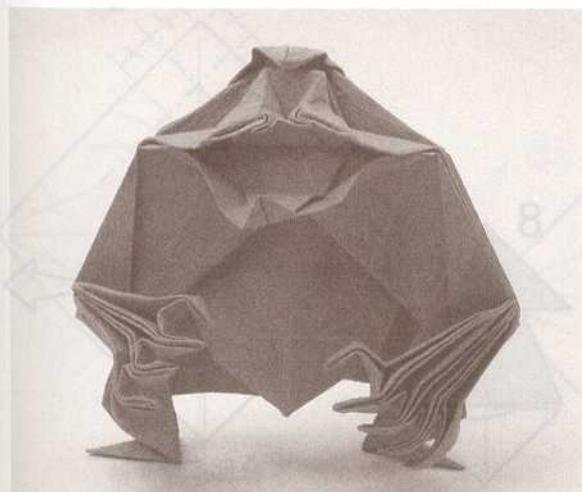
後は写真を見ながら頑張ってみて下さい。

膝の部分はかぶせ折り、足先は中割り折りを2回です。

広島市立安佐動物公園のオランウータン「ジャック」をモデルにしましたが、ジャックは毛むくじゃらでいつも顔はよく見えませんでした。ニンヤリと笑っているのだろうと勝手に思いこんで制作しました。結局ゴリラなのかオランウータンなのか、はっきりしない動物になってしまいましたが、黒い紙で折ったときはゴリラ、赤茶色の紙で折ったときはオランウータンということにして楽しんでいます。

展開図の下半分の山谷を逆にして折ると左下の写真のように腹部が割れてないオラウータンができます。折り方はほとんど同じです。腹割れバージョンに続けて折つてみて下さい。

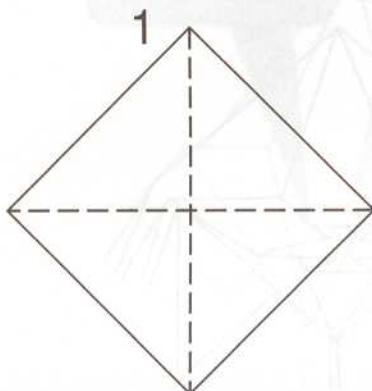
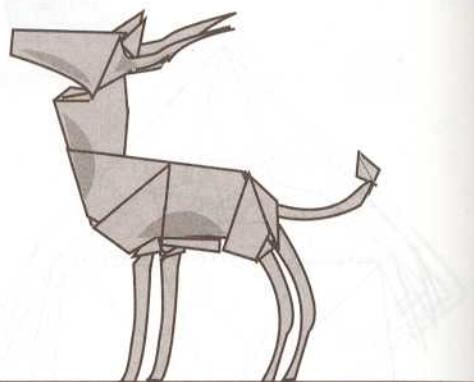
こちらの方がオラウータンらしいと思いますが、今度は背中が割れてしまいます。



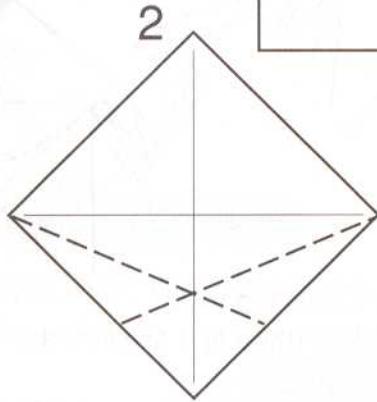
スプリングボック

springbuck

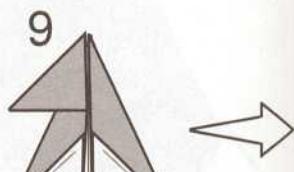
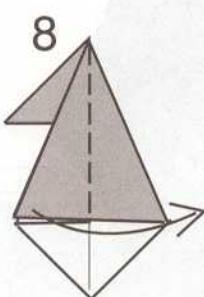
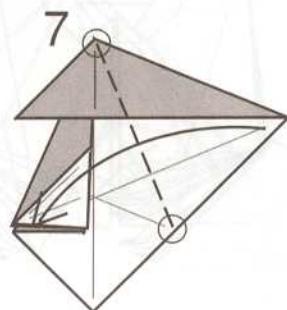
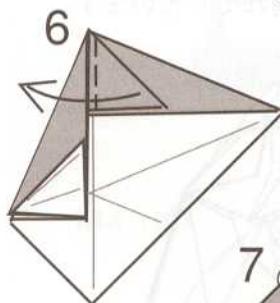
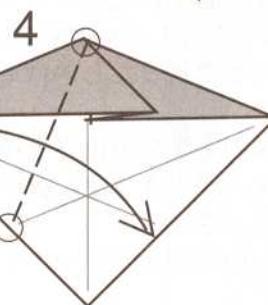
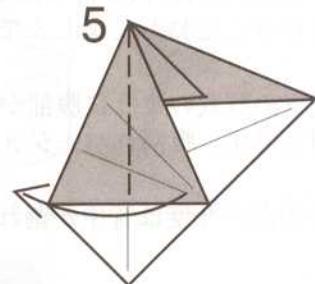
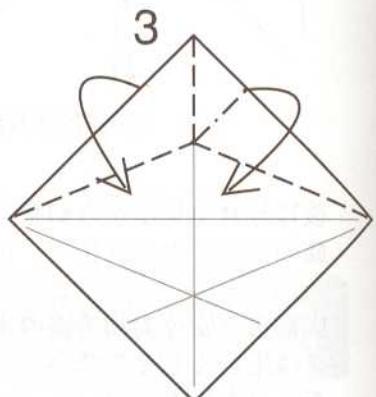
本田 弦



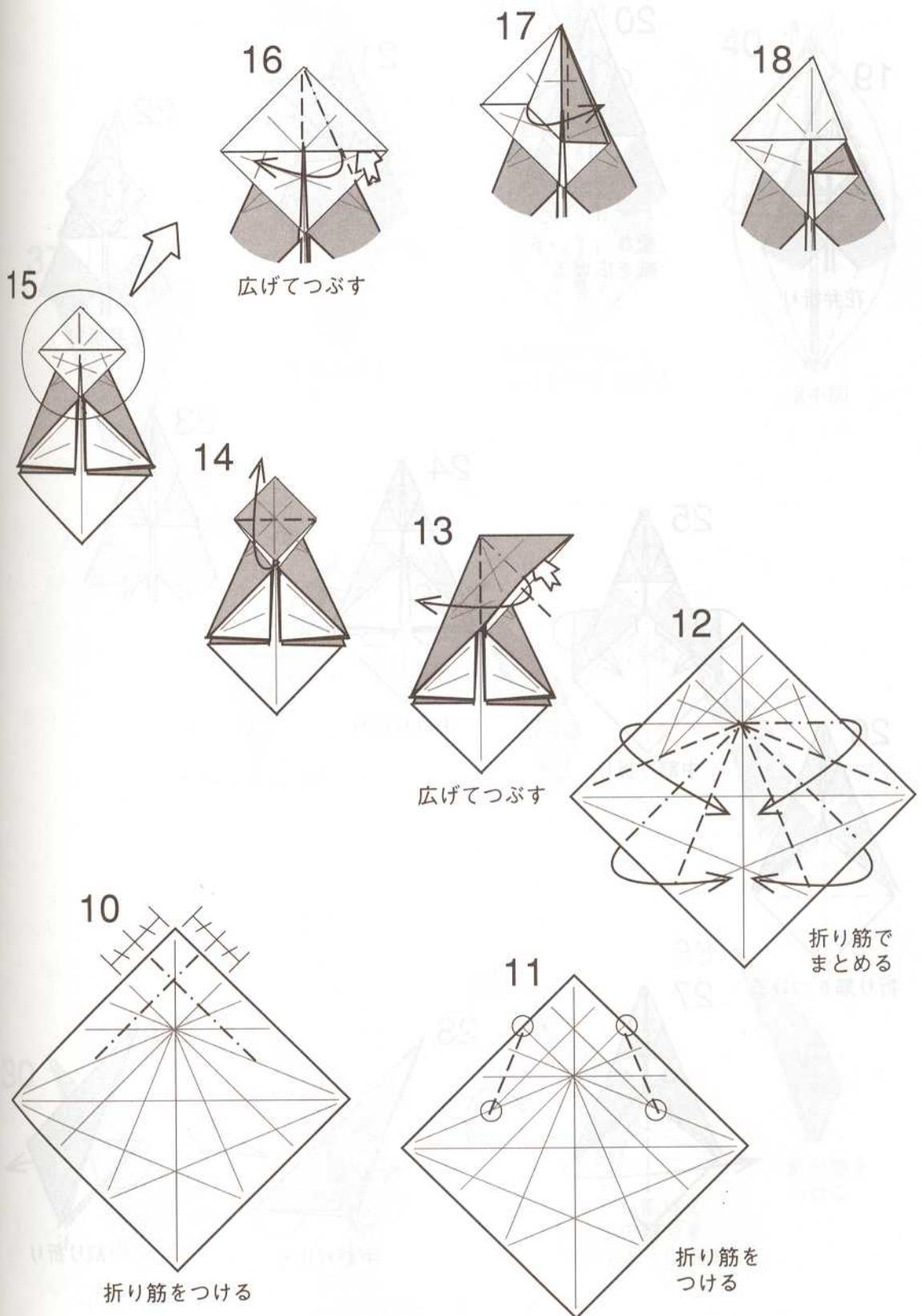
折り筋をつける

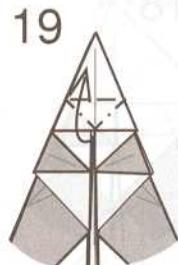


折り筋をつける

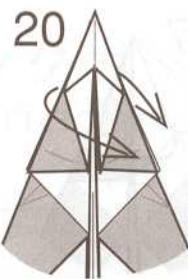


全部広げる

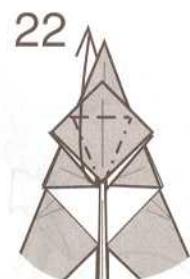
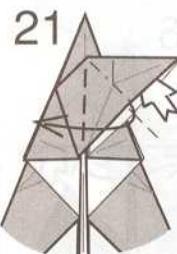




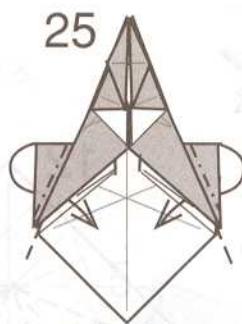
花弁折り



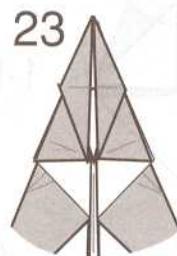
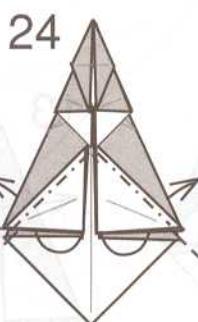
重なっている
紙を広げる



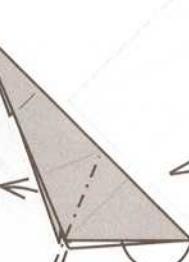
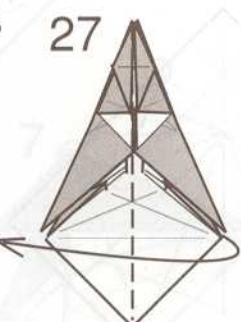
花弁折り



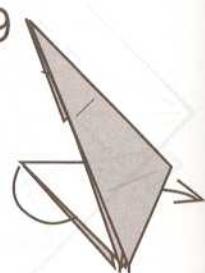
中割り折り



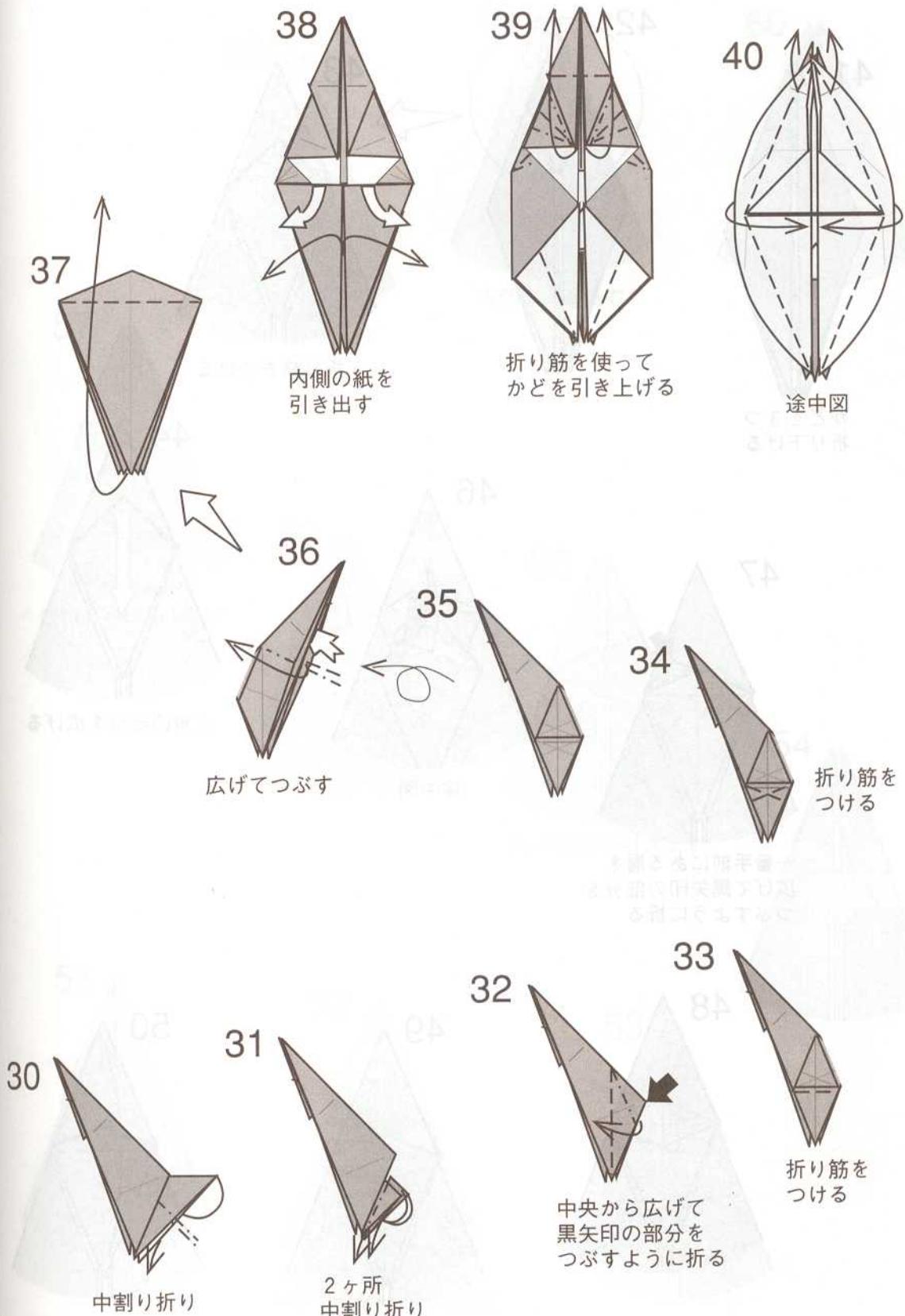
折り筋をつける

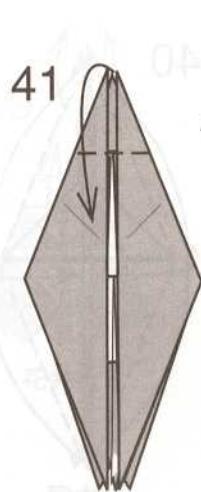


中割り折り

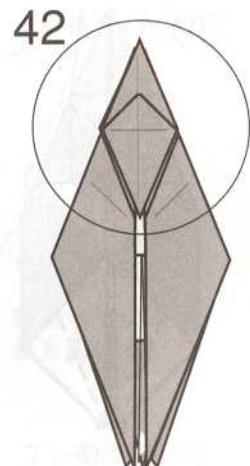


中割り折り

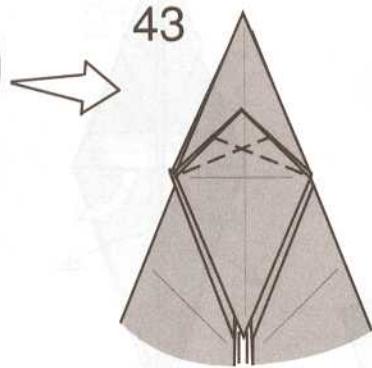




41



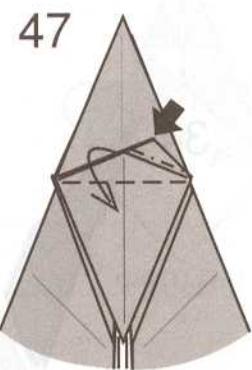
42



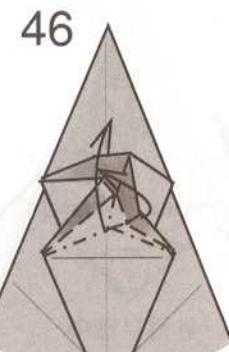
43

折り筋をつける

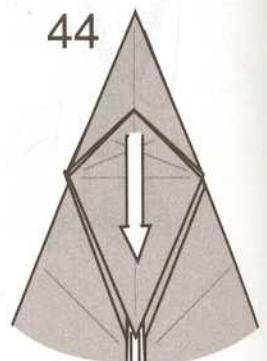
かどを3つ
折り下げる



47



46



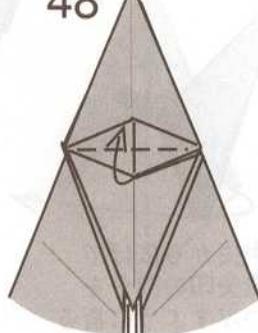
44

三角の部分を広げる

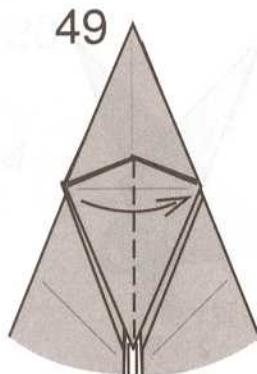
途中図

一番手前にある層を
広げて黒矢印の部分を
つぶすように折る

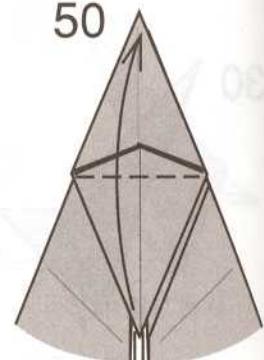
48



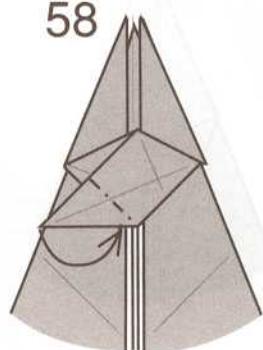
49



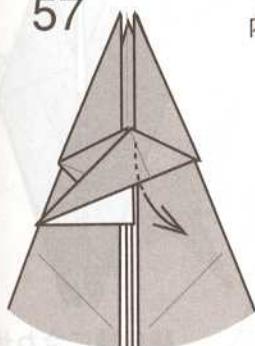
50



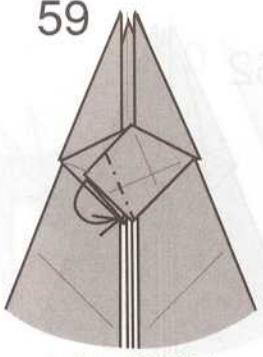
58



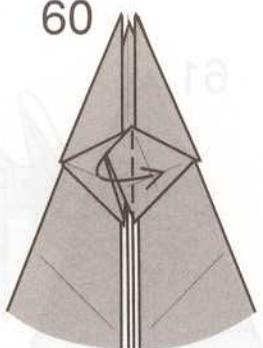
57



59

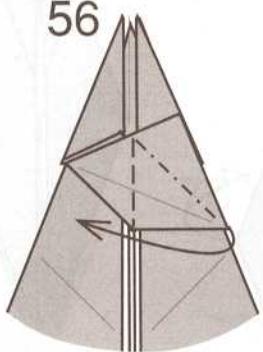


60

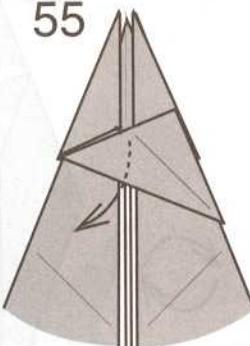


内側に折り込む

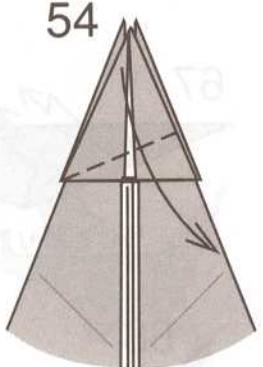
56



55



54

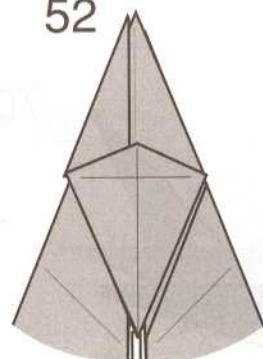


内側の紙を引き出す

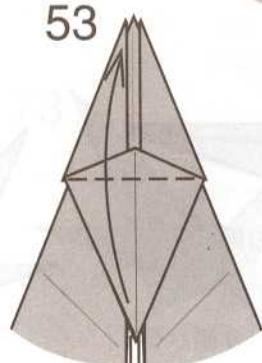
51



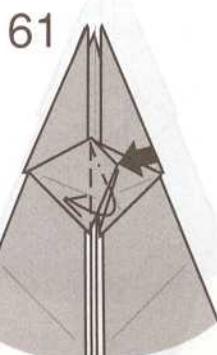
52



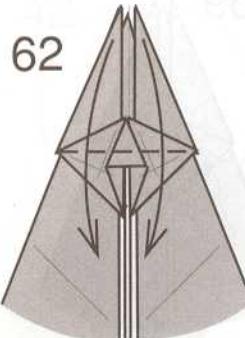
53



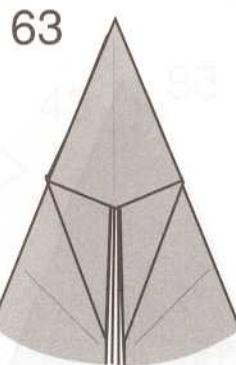
右側も49～51と同じ



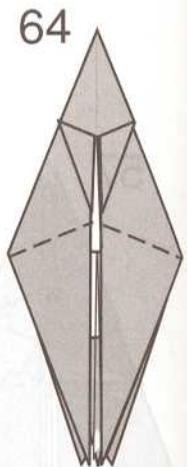
61



62

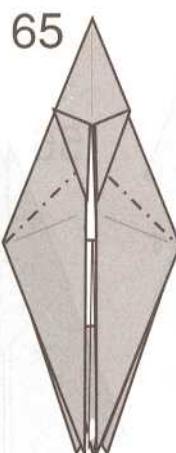


63

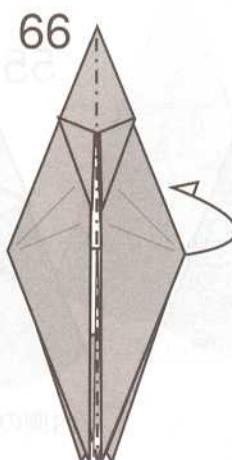


64

広げて黒矢印の部分
をつぶすように折る



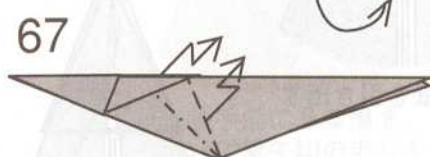
65



66

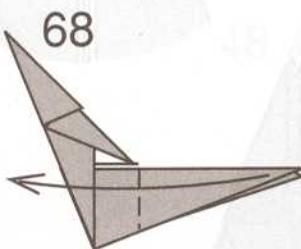
後の縁に合わせて
折り筋をつける

折り筋をつける



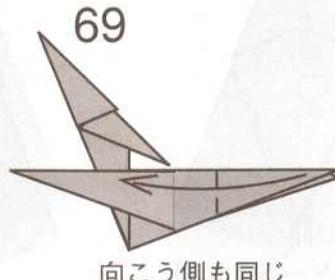
67

つけた折り筋で段折り



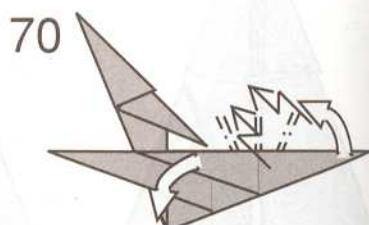
68

向こう側も同じ



69

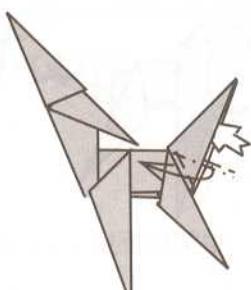
向こう側も同じ



70

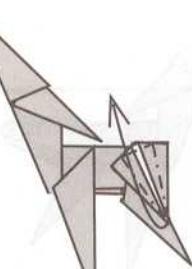
内側をついている折り筋で
段に折りながら回転させる

78



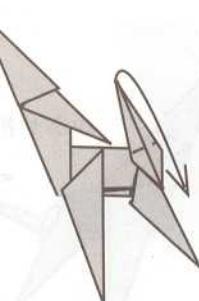
広げてつぶす

79

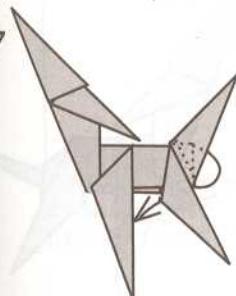


花弁折り

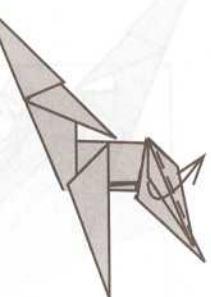
80



77

内側の2層を
中割折り

81

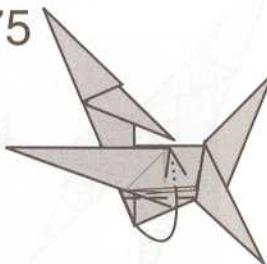


76

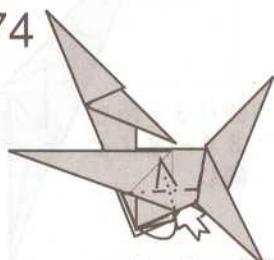


向こう側も同じ

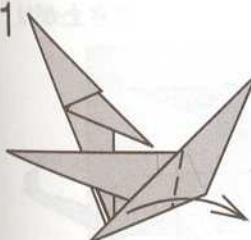
75

折り込んだところに
向こう側の紙を差し込む

74

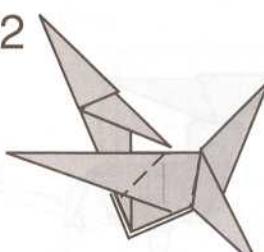
つけた折り筋で
穴に折り込む

71

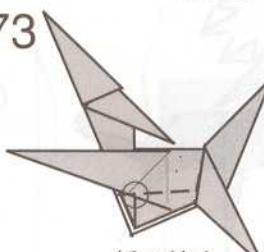


向こう側も同じ

72

折り筋をつける
向こう側も同じ

73

折り筋を
つける

83

かぶせ折り

84

85

82

中割り折り

内側の紙を引き出す
向こう側も同じ

中割り折り

86

88

87

中割り折り

内側に折り込む
裏側も同じ

89

残り3ヶ所も
84～87と
同じ

中割り折り

93



90

段折り

91

内側に
折り込む

92

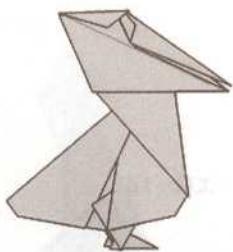
でき上がり

形を整える

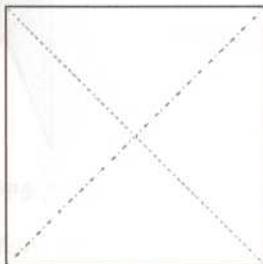
ペリカン

Pelican

芦村俊一 / Ashimura Shun'ichi



工程 - 1



対角線に山・谷折で
折線をつけておきます

工程 - 2

工程 - 3

戻します

工程 - 5

工程 - 4

裏返します

工程 - 6

戻します

工程 - 7

裏返します

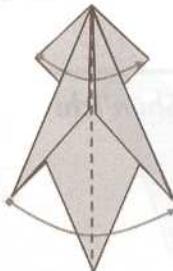
工程 - 8

工程 - 9

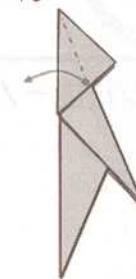
戻します

67

工程-17



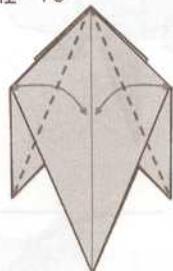
工程-18



工程-19



工程-16



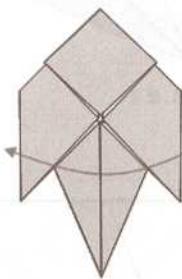
全体を半分に折ります

手前の袋を広げてたたみます

(たたむ途中)

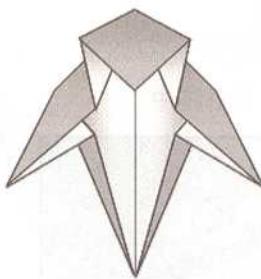
(次の図を参考に)

工程-15



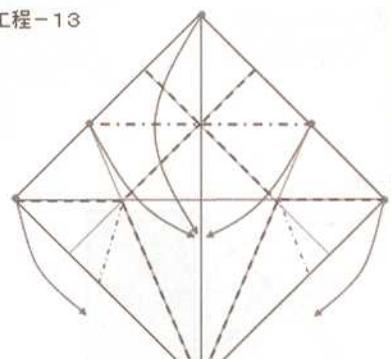
裏返します

工程-14



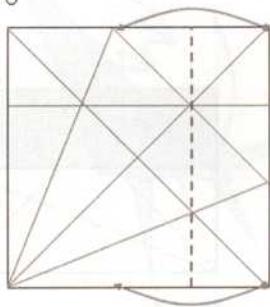
(たたむ途中)

工程-13

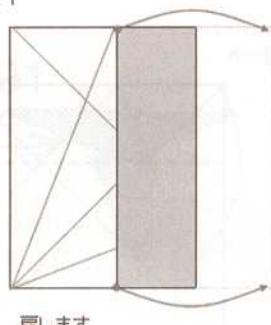


折り筋に従ってたたみます

工程-10

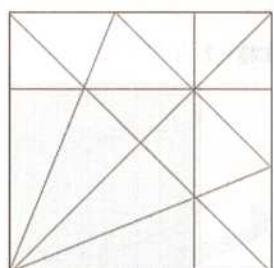


工程-11

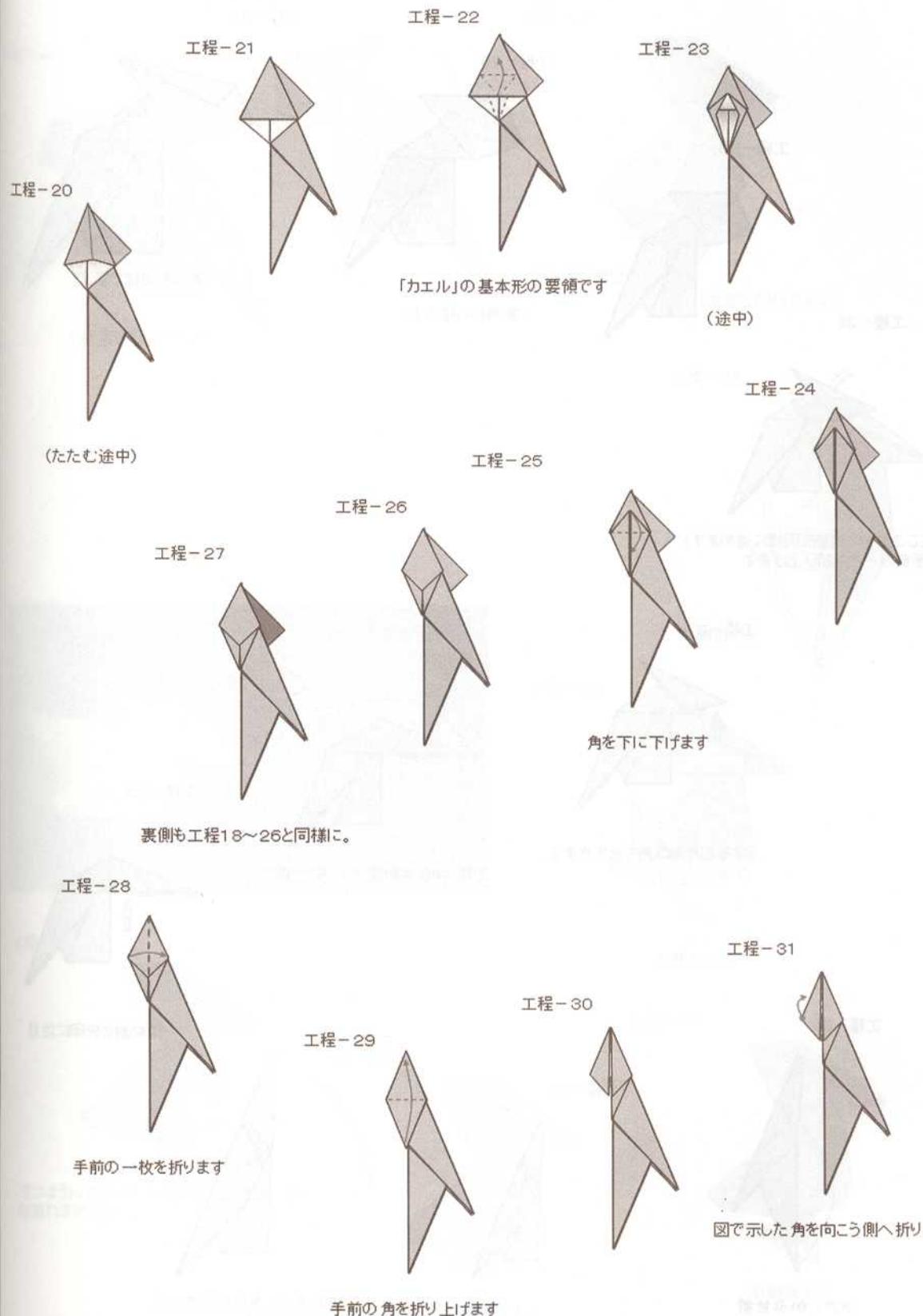


戻します

工程-12

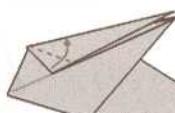


このように折筋ができます

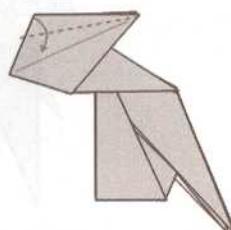


工程 - 41

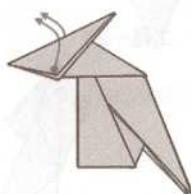
工程 - 40



工程 - 39



工程 - 38



（裏側も同様ですよ）

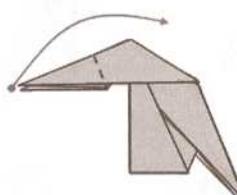
（裏側も同様ですよ）

（ここからは裏側も同様に進めます）
手前の一枚を折り上げます

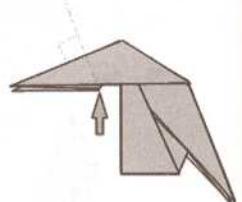
工程 - 37



工程 - 36



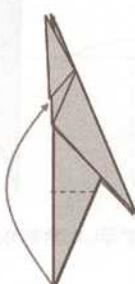
工程 - 35



、すると内側の角も出でてきます。

工程34の補助線でかぶせ折で

工程 - 32

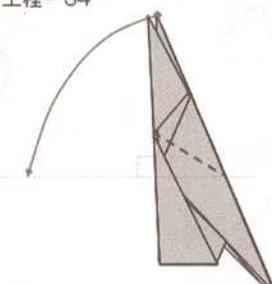


大きくかぶせ折

工程 - 33



工程 - 34



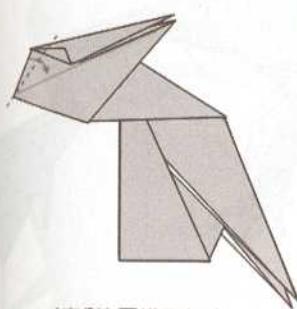
補助線と矢印に注目

折の支点と角度に注意して、
かぶせ折です

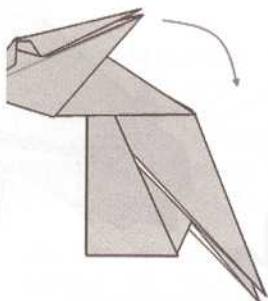
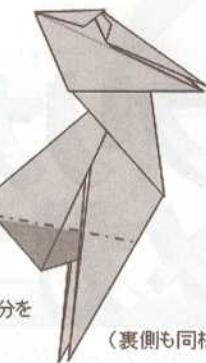
工程-43

工程-42

工程-44

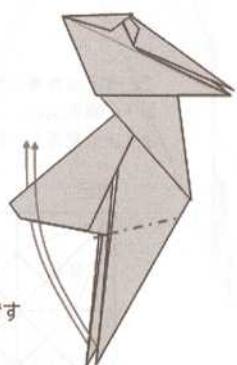
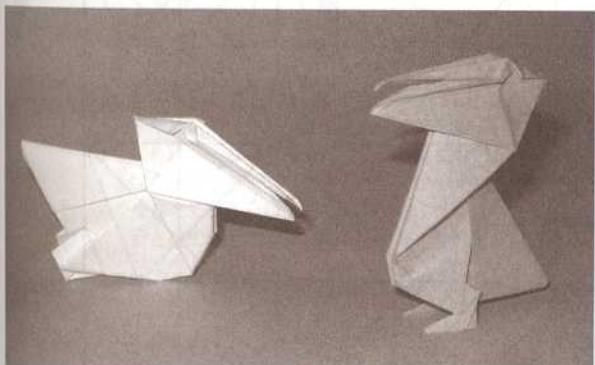


(裏側も同様ですよ)

ピンクの部分を
内側に

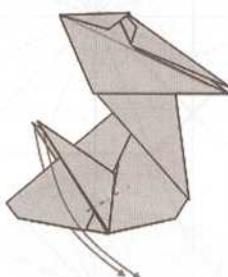
(裏側も同様ですよ)

工程-45



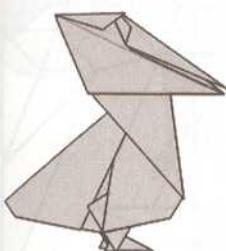
中割折です

工程-46

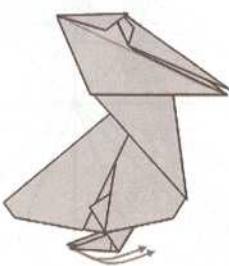


中割折です

工程-49

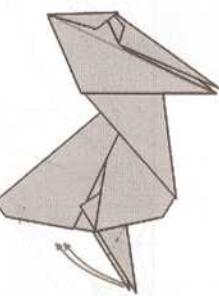
立つように足の折りを微調整して完成です。
お疲れさまでした。

工程-48



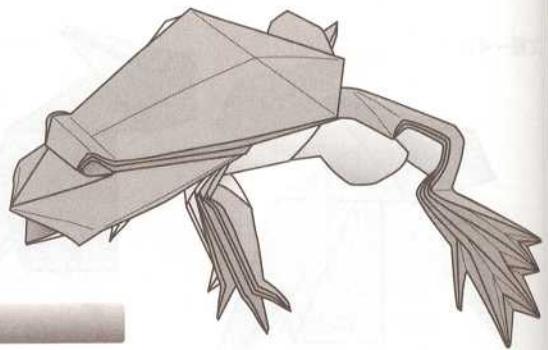
中割折です

工程-47



中割折です

アフリカ ツメガエル



"Xenopus borealis" ©HOJOYO Takashi 2003

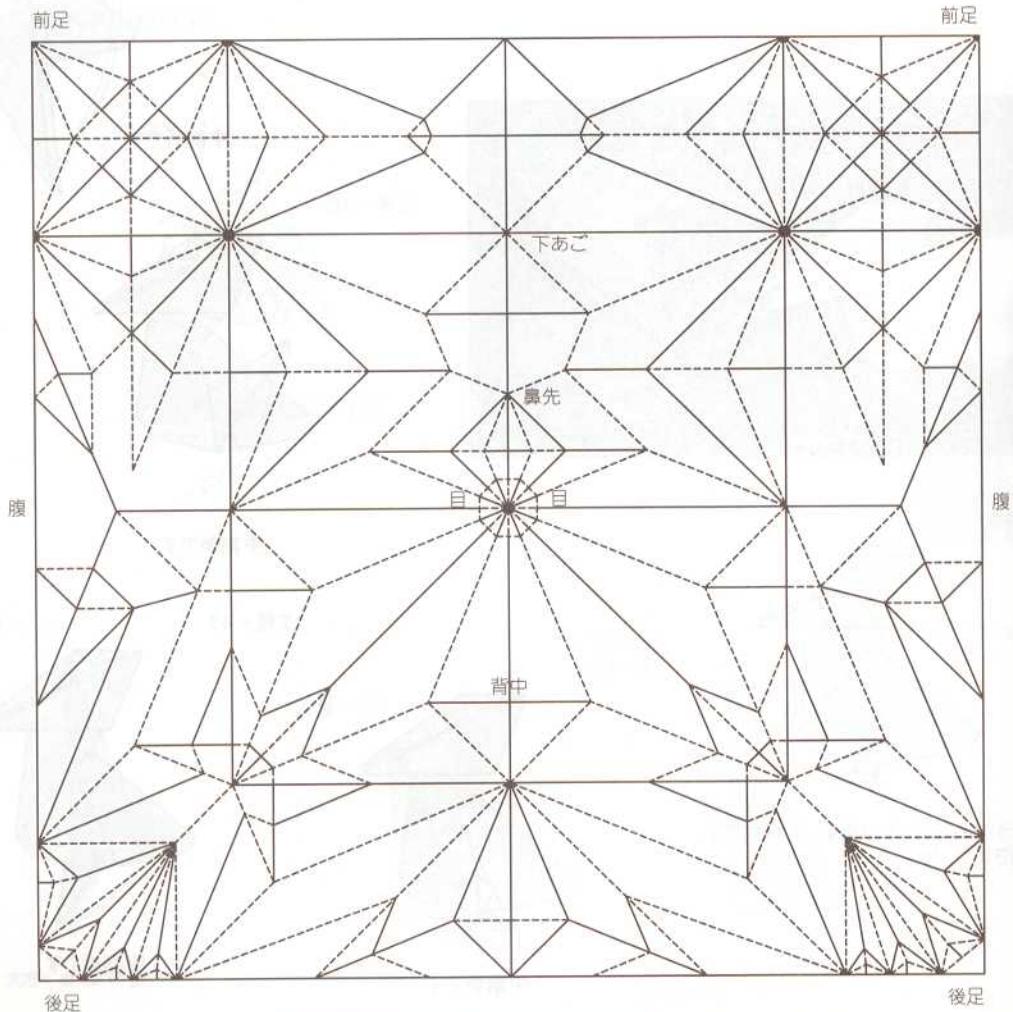
創作・図 北條高史

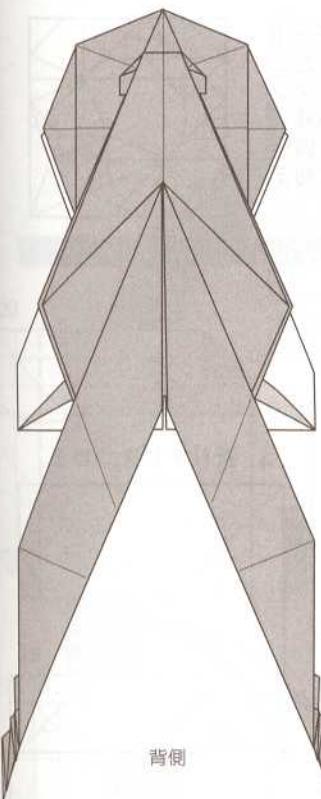
創作：2003/05/25

作図：2003/07/05

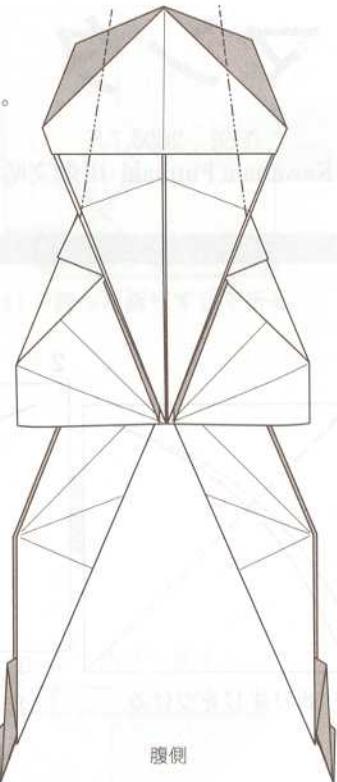
この作品は表裏の色が異なる用紙を用いると、背側と腹側を色分けした完成形にすることができます。

以下の展開図は、用紙の裏側（作品の腹側の色になるほう）から見たもので、点線が谷折り、実線が山折りとなります。よくよく見ると…基本的な比率は拙作「人物の基本形」と同じです。





背側



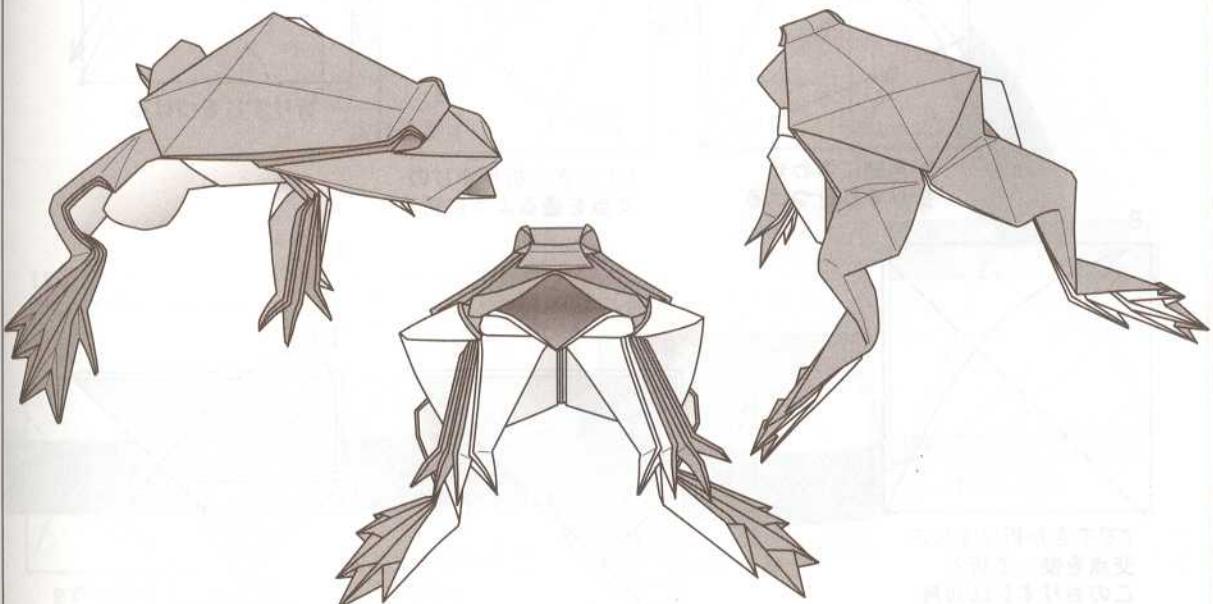
腹側

前頁の展開図通りに折ると、左右の図のようになります。腹の一部は平面的にぴったりとは折れずに、立体的に少し湾曲したような状態になります。

ここまでできたら、右の腹側の図にある折り線で頭部を細くし、下の完成図を参考にしてポーズを付けましょう。目の部分は、筒のように巻いて表現します。

前足の指は、腕の根元まで裂けた状態になっています。適度な長さを残して糊付けしてしまうのが簡単ですが、指の間の用紙を引き出し、隙間に差し込むことによって腕全体の開き止めを行い、同時に指の長さを調節するという方法も可能です。

本作の題材である「アフリカツメガエル」は、筆者が大学院時代に研究対象として扱っていた実験動物です。一般的によく見かけるのは *Xenopus laevis* ですが、本作は北方亜種である *borealis* を参考にしています。これは *laevis* よりも小型で、少々太めなのが特徴。水中での生活が主で陸上にあがることはなく、本当に図のようなポーズで水中に浮かんでいます。食欲旺盛で、実験室では牛レバーをサイコロ切りにしたものと与えていました。餌を前足で口にかき込む様子も、なかなかかわいらしいものでした。目と目の間をもう少し広くしたかったのですが、作品として自然なまとまりが得られたので、このままで完成形としました。

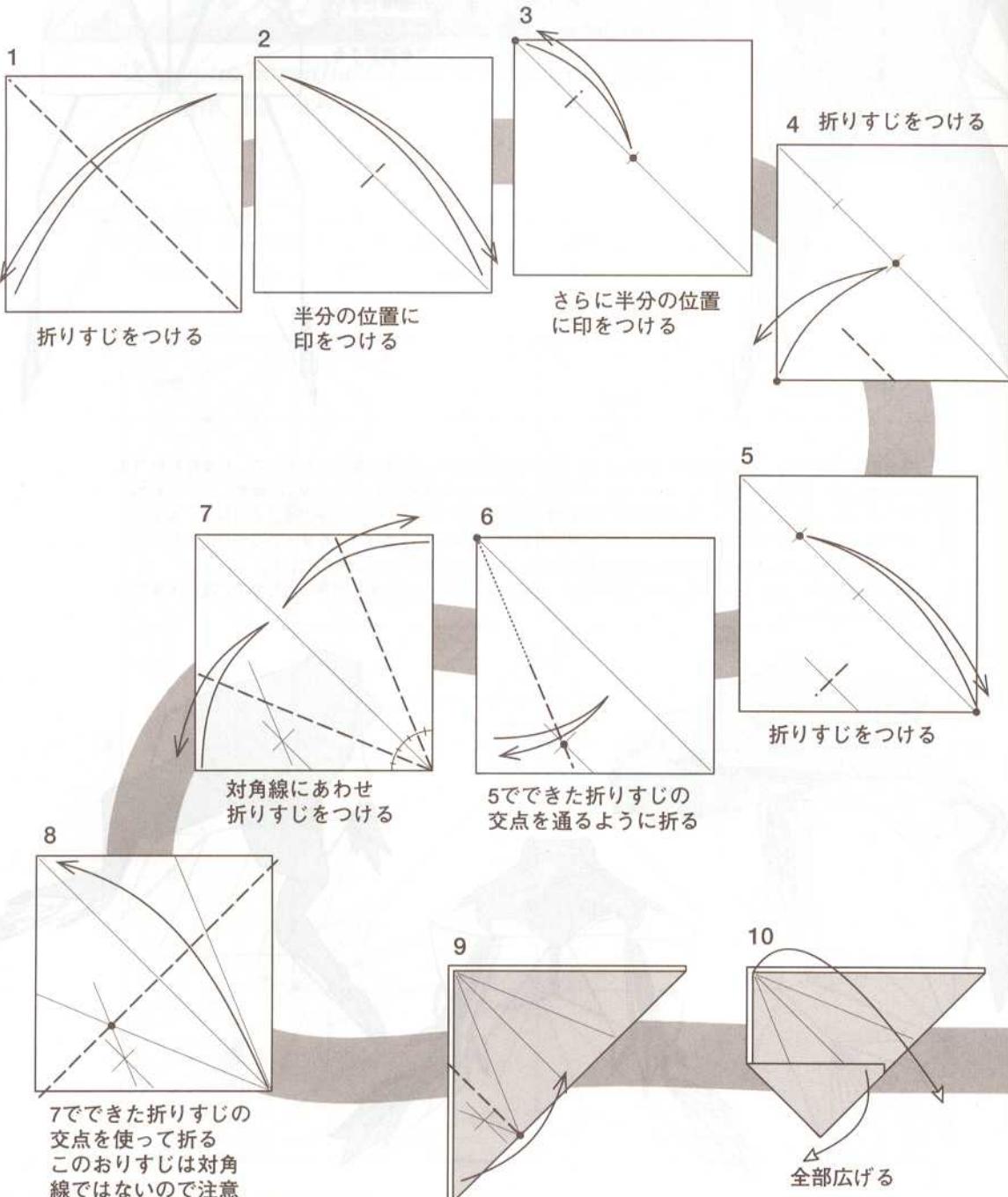
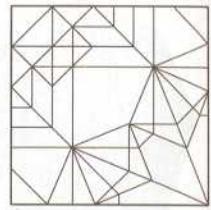


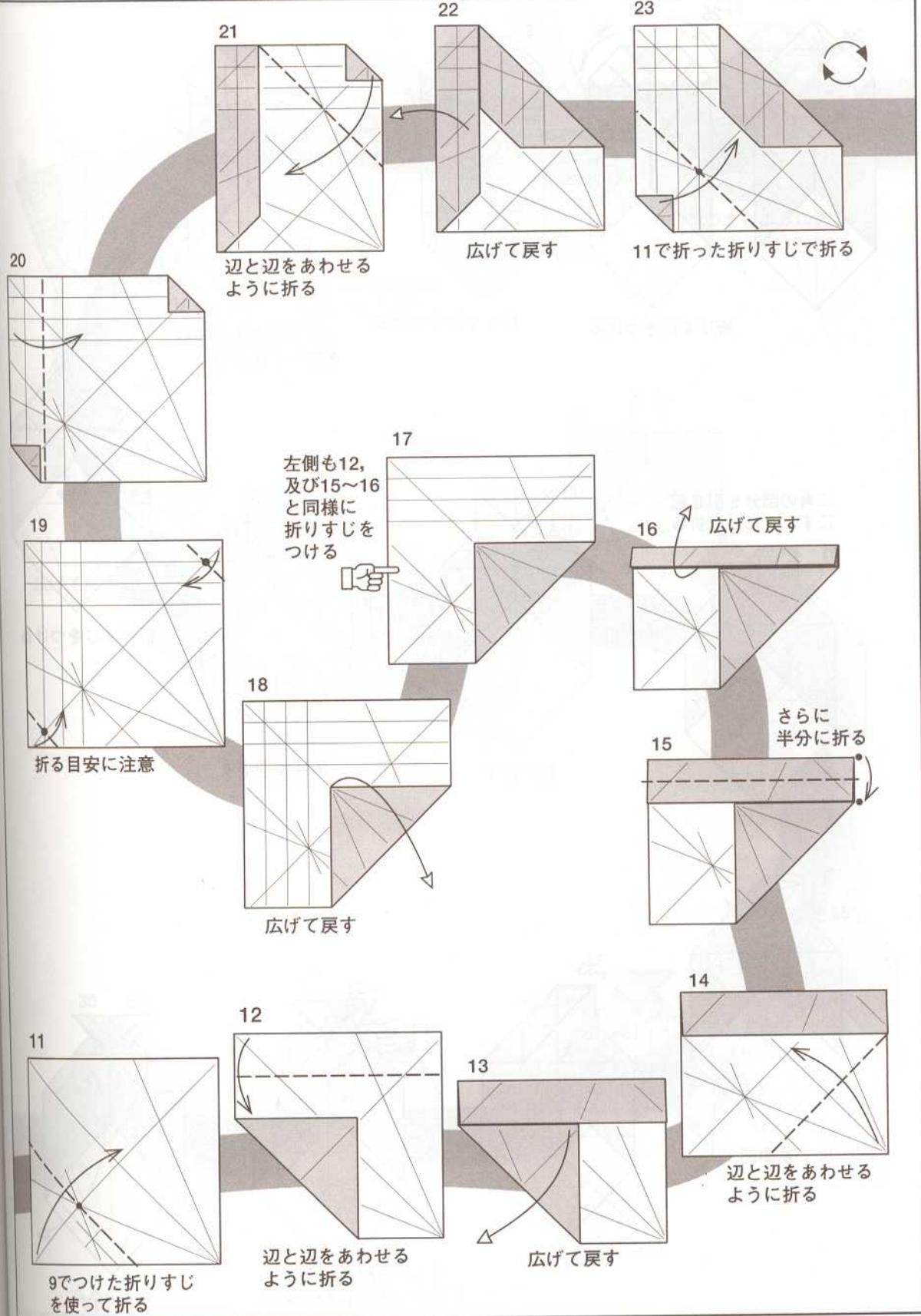
マンタ

作図 2003.7.5

Kawahata Fumiaki 川畠文昭

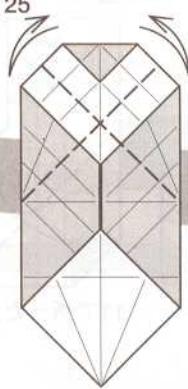
約10年前のことですが、ある企画の展示用に吉野一生さんと私とでマンタの競作をしたことがあります。結局、吉野さんの素晴らしいマンタが展示用として選ばれたのですが、その時折った私の作品が最近段ボール箱の底から偶然見つかったため、これを機会に少し修正を加え折図にまとめてみました。



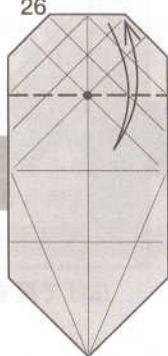




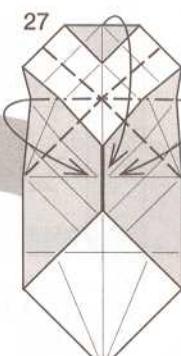
25



26



27

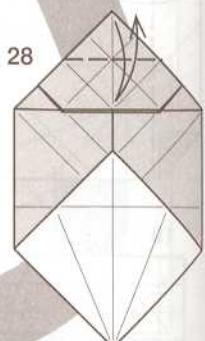


折りすじをつける

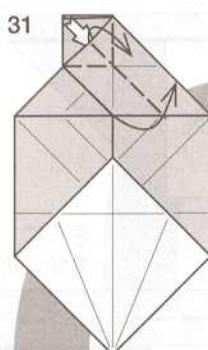
折りすじをつける

ついている折りすじ
を使ってまとめる

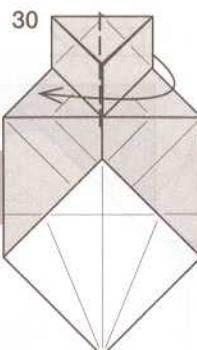
28



三角の部分を引き起
こすようにして折る

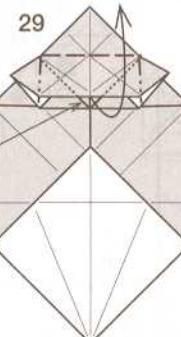


31



30

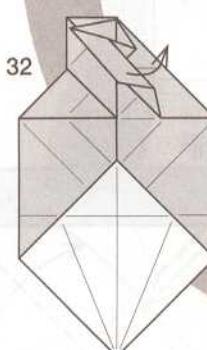
折り返す



29

広げてつぶす

折りすじをつける



32



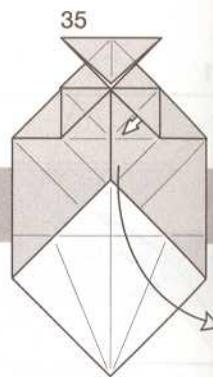
33

折り返す



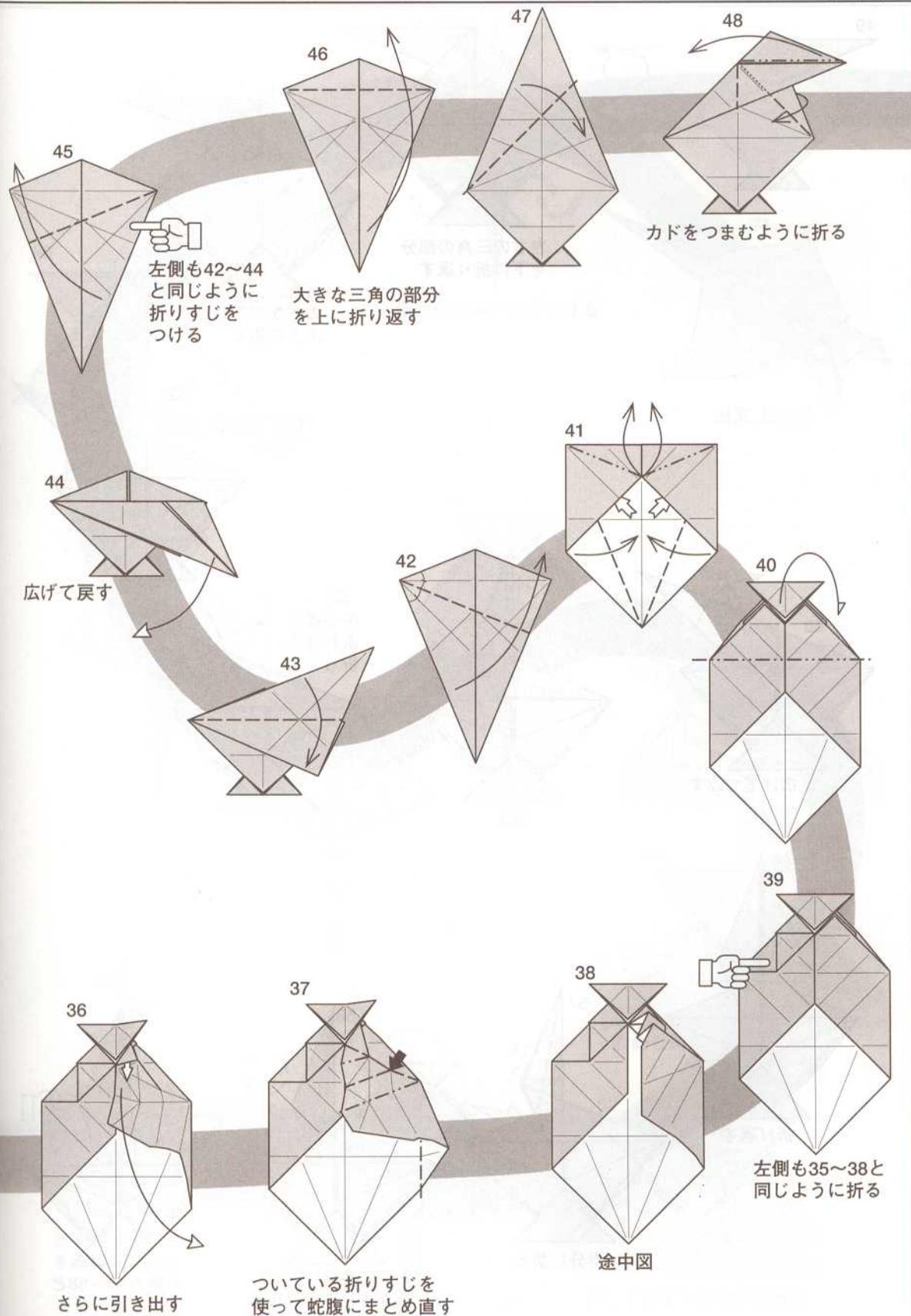
34

左側も30~33と
同じように折る

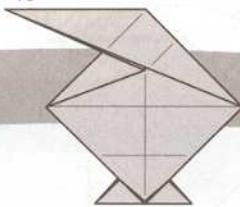


35

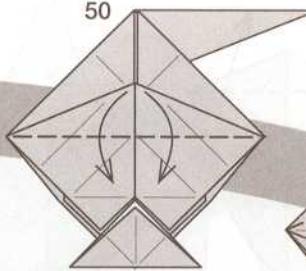
引き出す



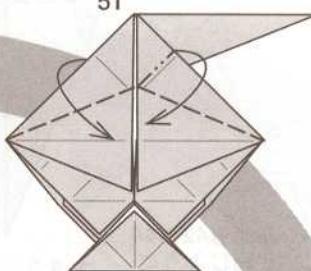
49



50



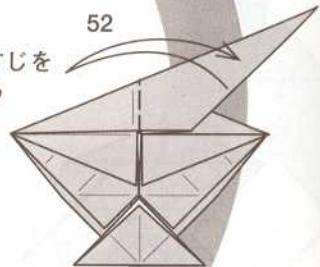
51



左右の三角の部分
を下に折り返す

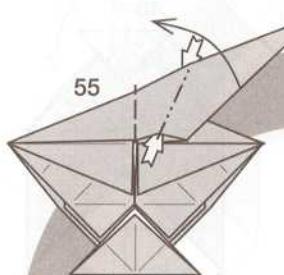
カドをつまむ
ように折る

52



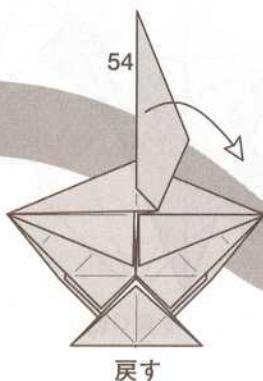
折りすじを
つける

55



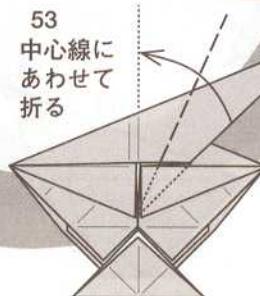
広げてつぶす

54



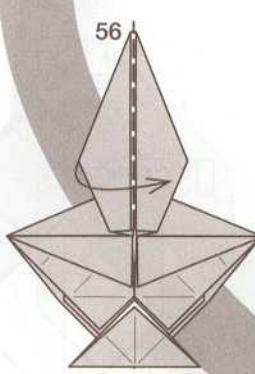
戻す

53



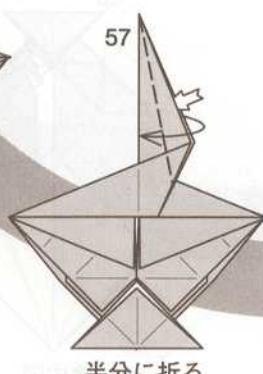
中心線に
あわせて
折る

56



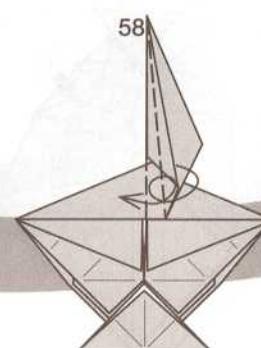
折り返す

57



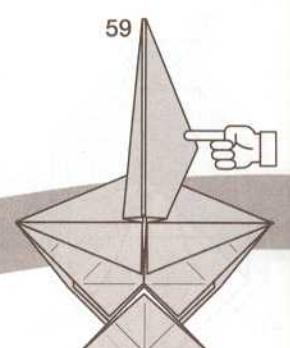
半分に折る

58

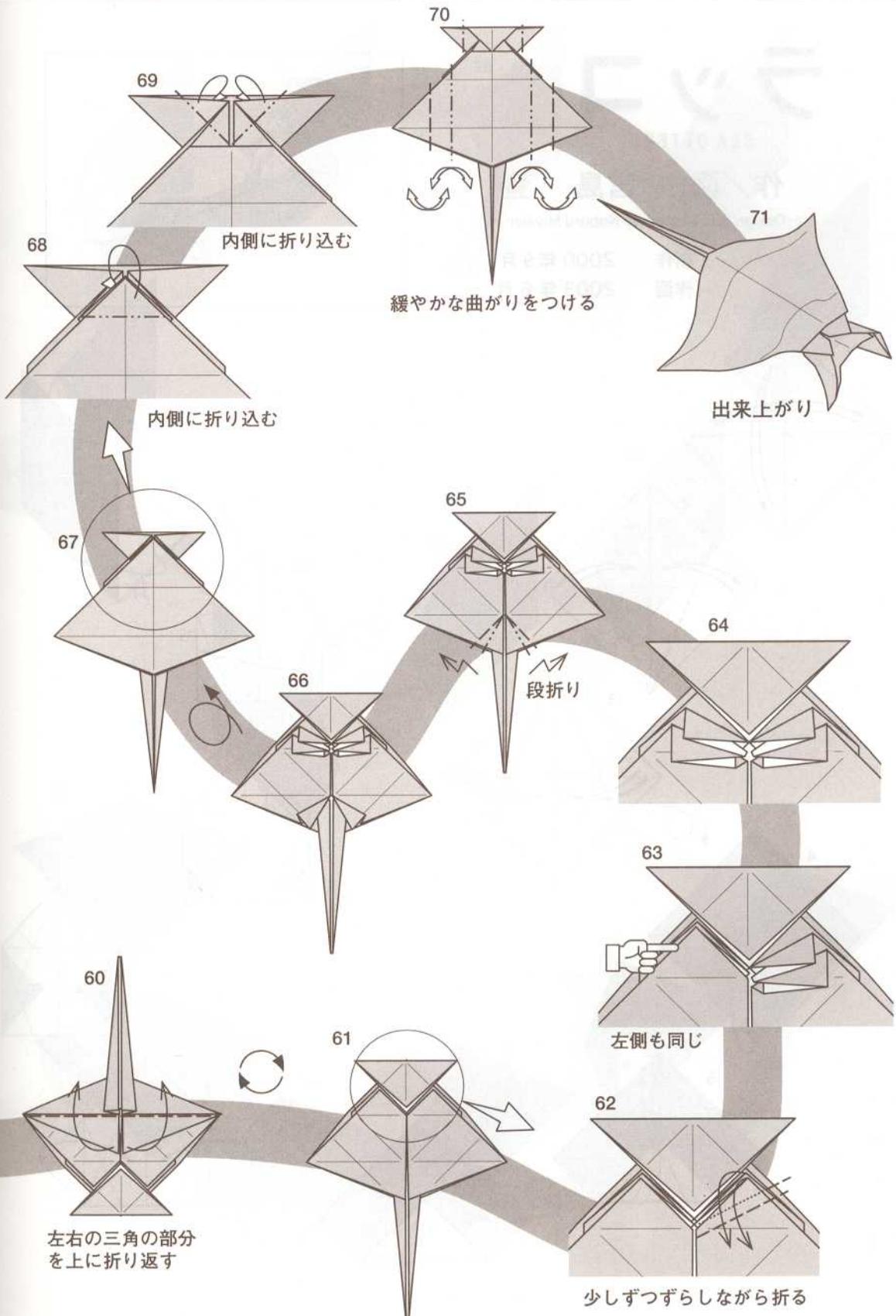


さらに半分に
巻き込むように
折る

59



右側も55~58と
同じように折る



ラッコ

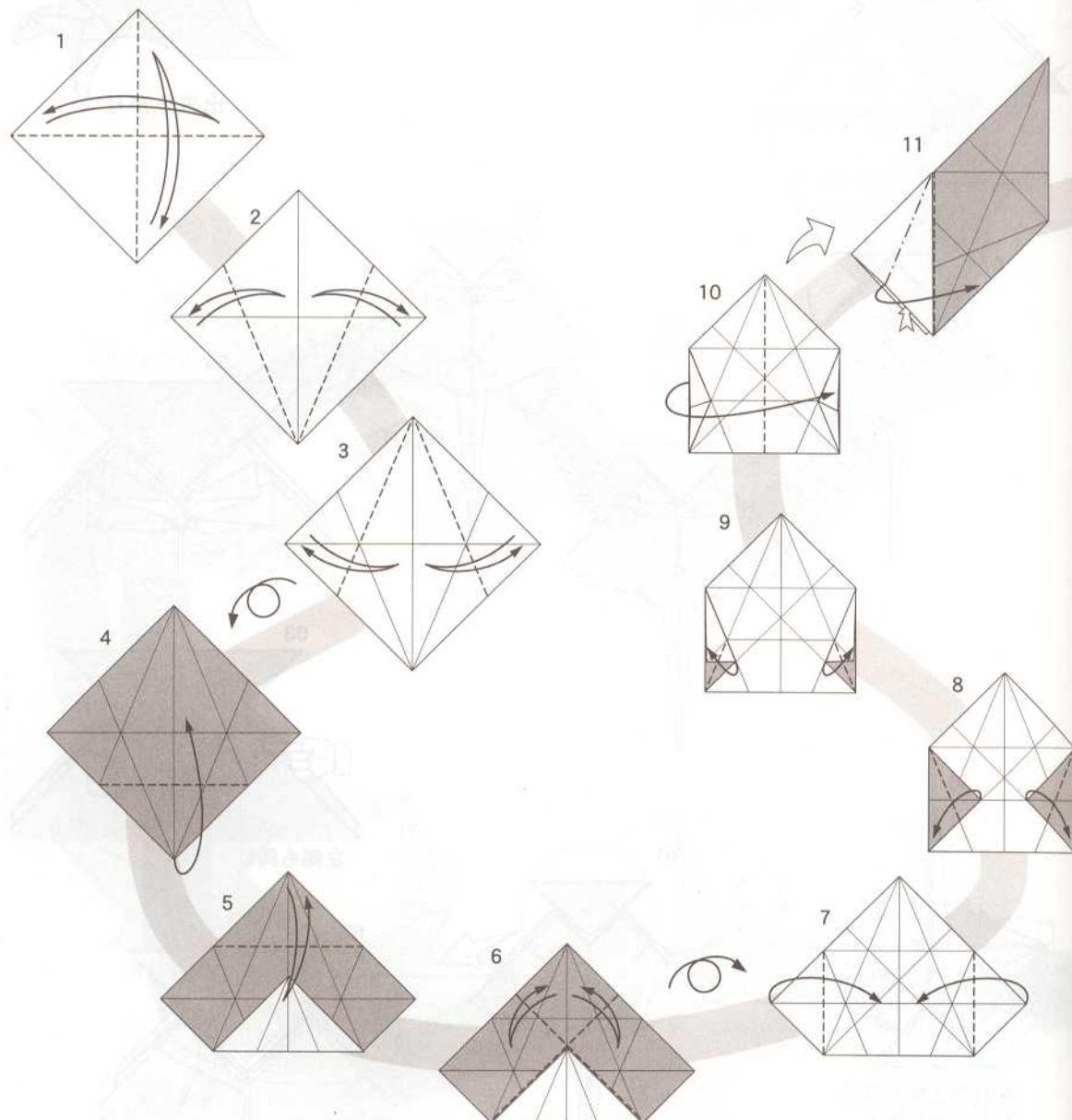
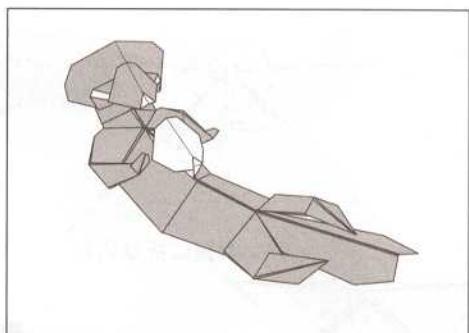
SEA OTTER

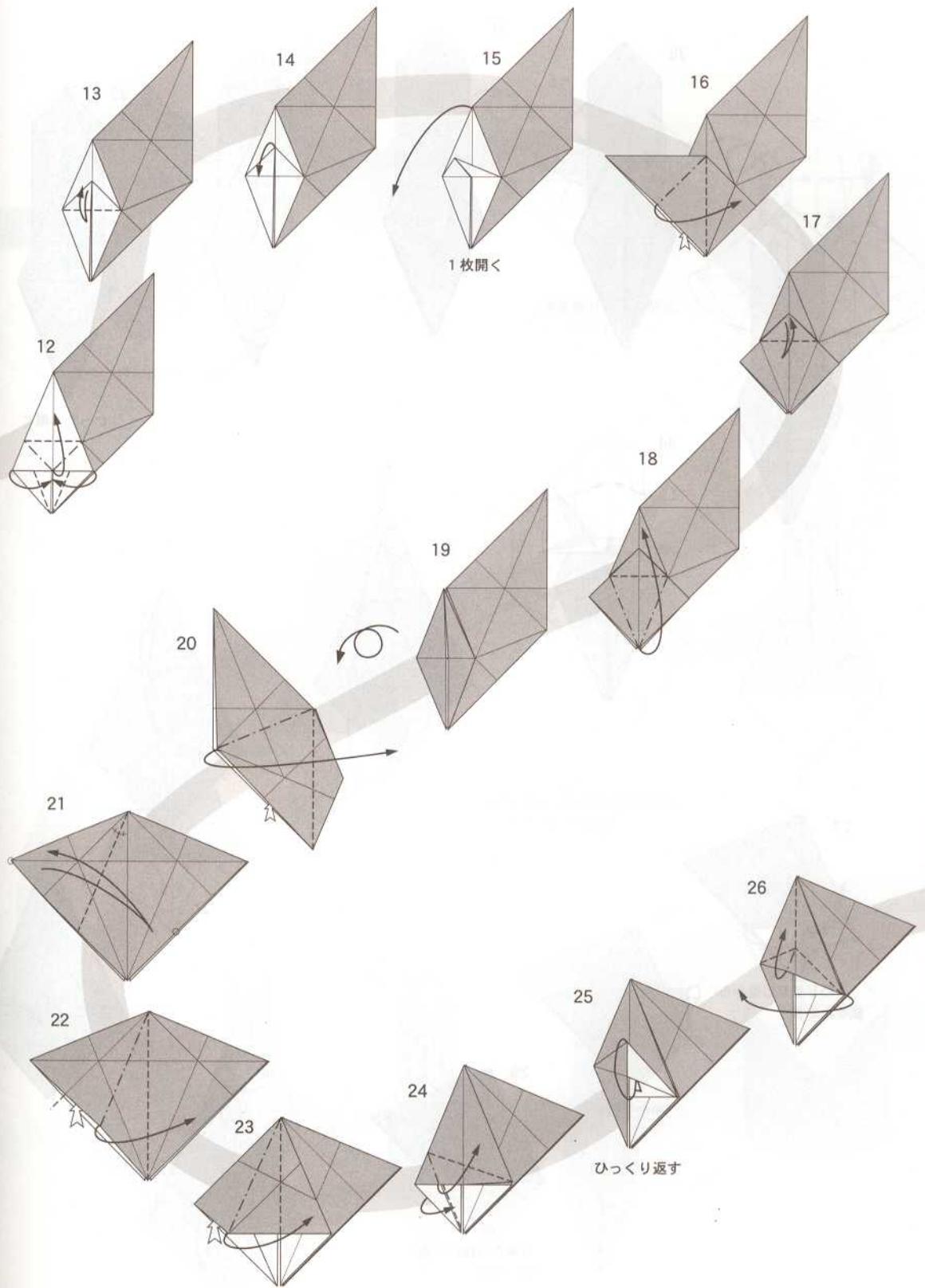
作／図 宮島 登

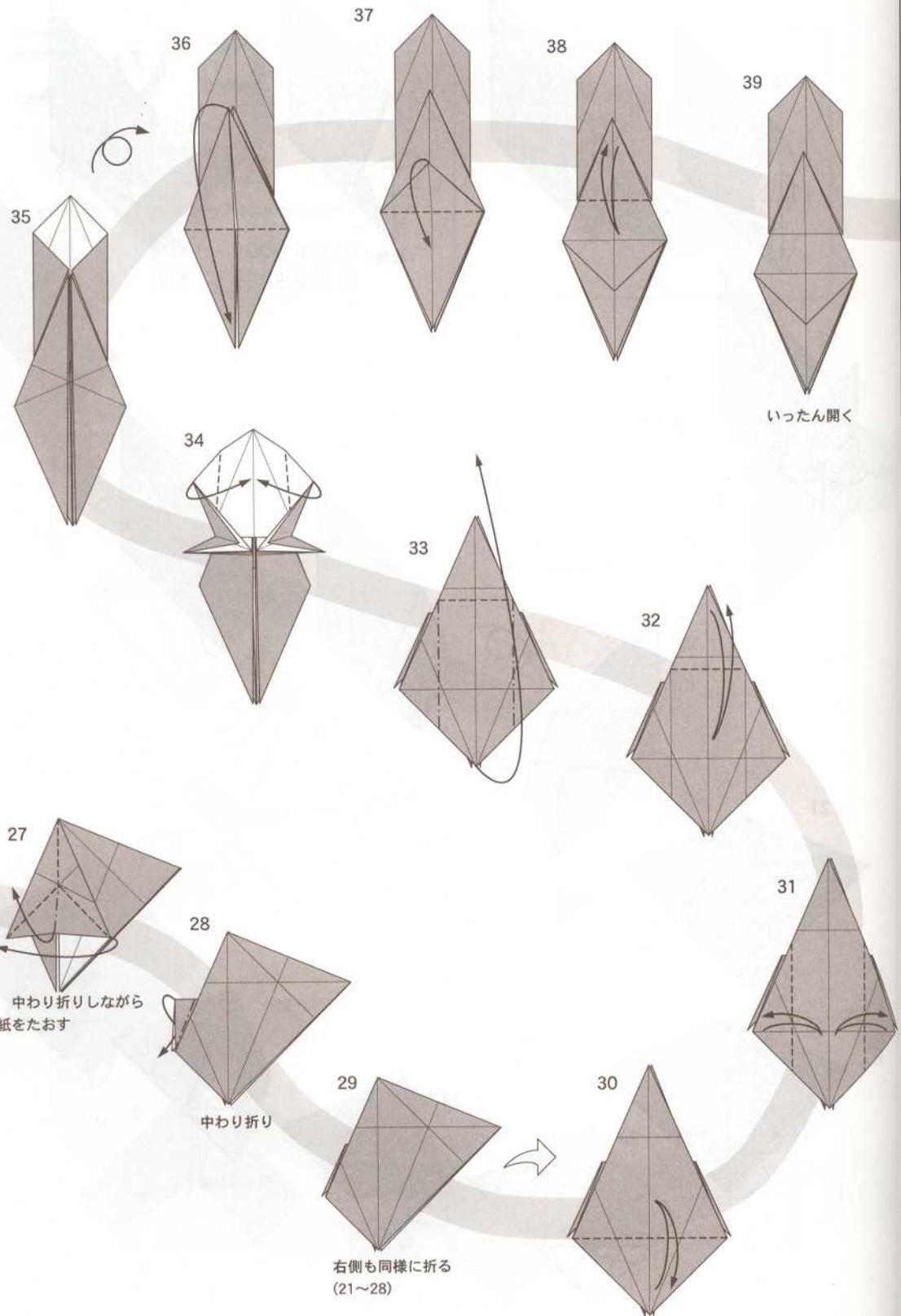
Design & Diagrams By Noboru Miyajima

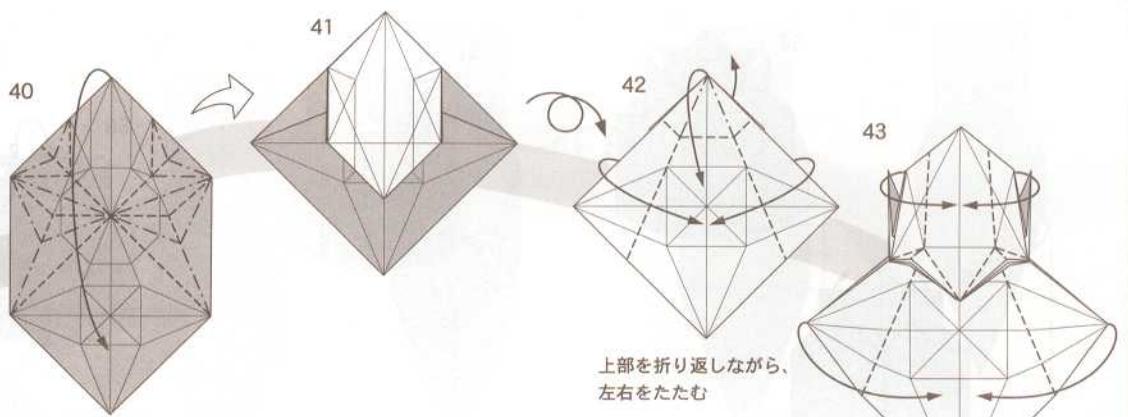
創作 2000年9月

作図 2003年6月

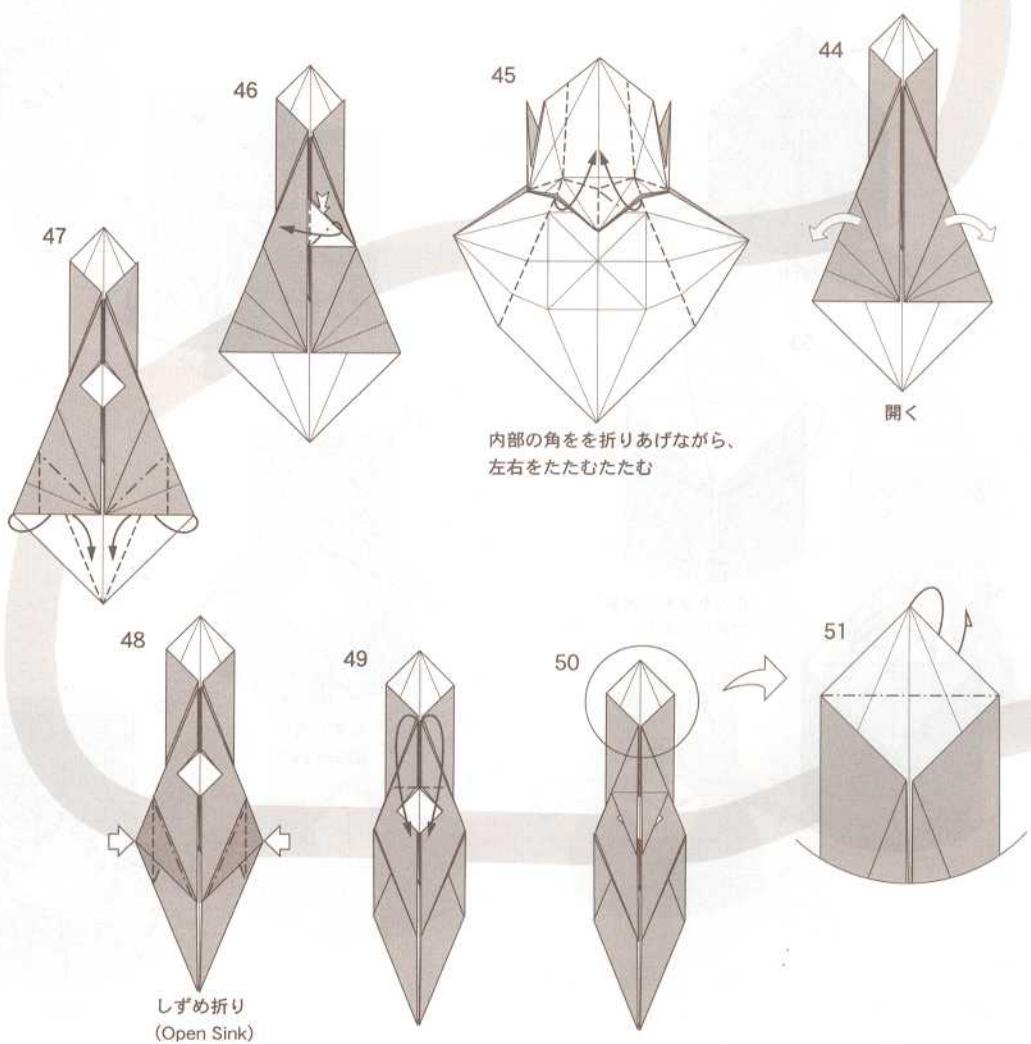


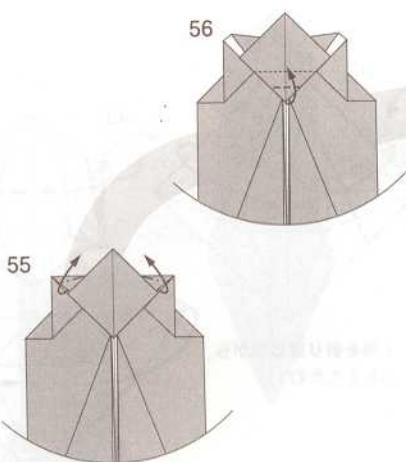




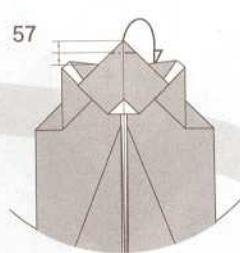


[途中図]

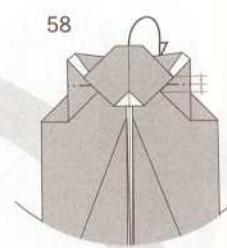




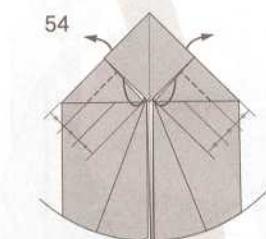
ずらすように折る



57

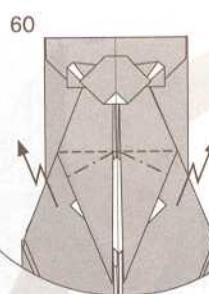


58

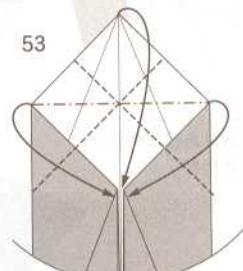


54

中わり折り

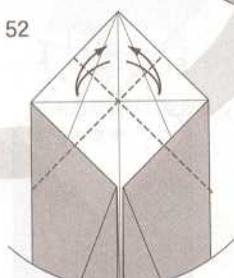


60

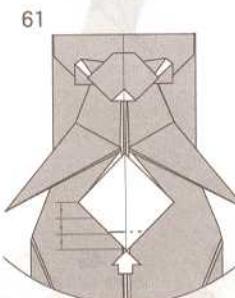


53

正方基本形の要領
で折りたたむ

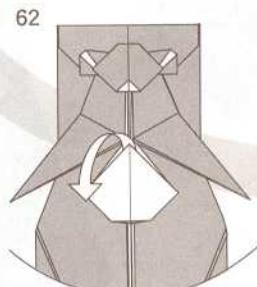


52



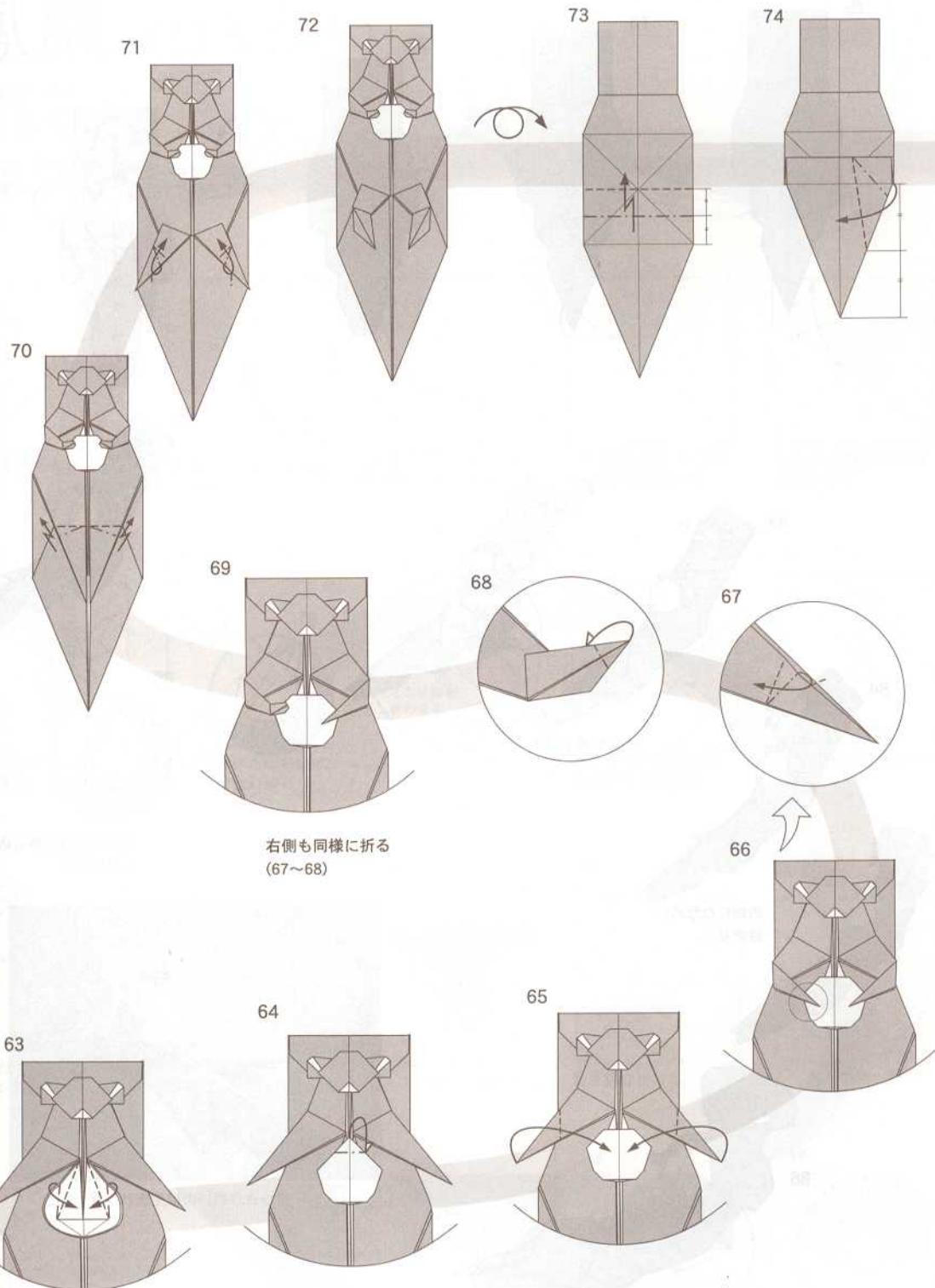
61

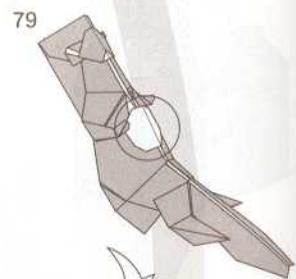
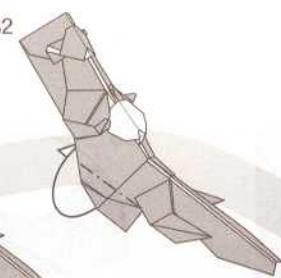
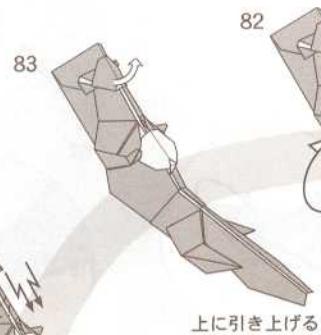
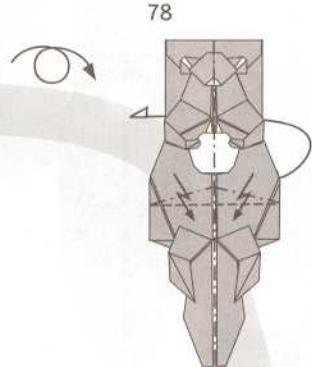
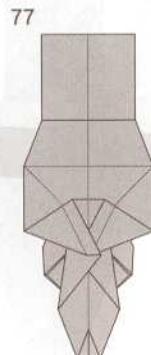
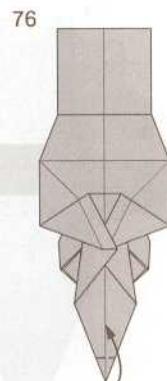
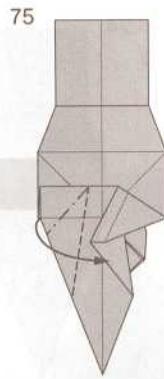
しづめ折り
(Open Sink)



62

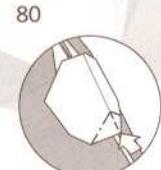
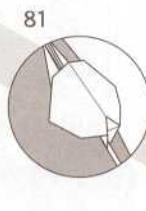
開く



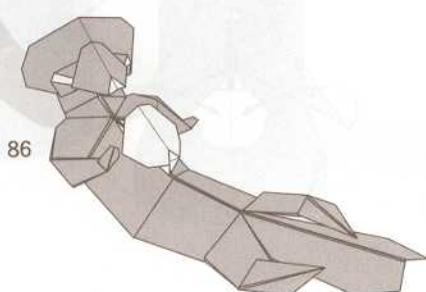


上に引き上げる

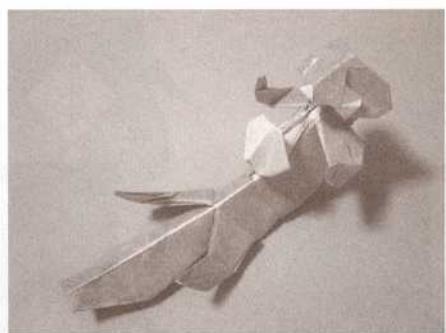
内側にななめに
段折り



白矢印部分を押し込む
ように折る



できあがり

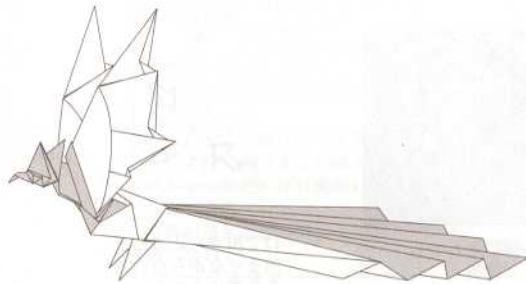


目つきが悪いのは生まれつき

鳳凰 (ほうおう)

創作者：山口 智之
創作：2003年5月
作図：2003年5月

尾と内部の構造に見られる「沈め段折り」
が難所。折り線をしっかり付けて下さい。



1 折線を付ける

2 ○を中心に行わせ対角線の上に印を付ける

3 ○を2で付けた印に合わせ対角線とふちに印を付ける

4 ○を3で付けた印に合わせて折り線を付ける

5 ふちを対角線に合わせ印を付ける

6 4と5の交点を基準として対角線上に印を付ける

7 5と6で付けた印の2/3の所に角を合わせる

7.5
6の印
1/3
2/3
ここに角を合わせる
5の印

**8 角を7に合わせて折る
※以下2~7は省略**

9 ○を基準に折り線を付ける

10 9で付けた線を中心線に合わせるように段折り

**11 半分に折る
(次図は45°回転して見る)**

**12 折線を付ける
(次図は全部広げる)**

13 折り線を付ける

14 角を裏側へ折る

15 半分に折る

**16 折り線を付ける
△で示した線は工程43で
重要な線となる**

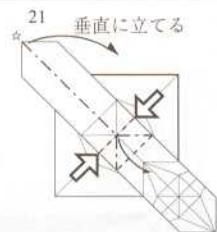
**17 開いてつぶす
丸の中を拡大**

18 角をめくるように折る

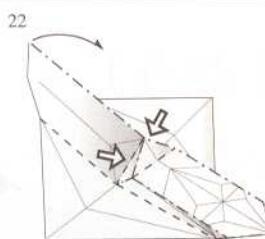
**19 全部広げる
(拡大終了)**



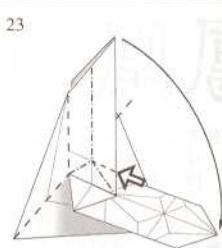
中心線に合わせる
ように段折り
(次図は裏返す)



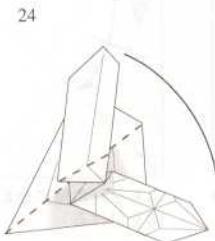
12で出来た正方形を
凹ませながら☆の角
を垂直に立てる



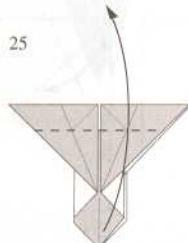
途中の図



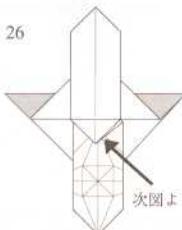
更に矢印部分を押し込むようにして
平面にたたむ



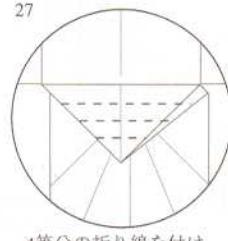
途中の図



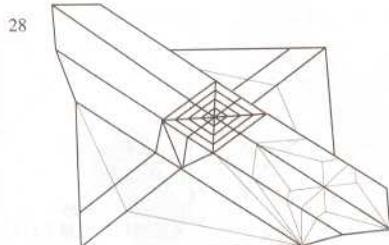
いっぱいに折れる所で
折り上げる



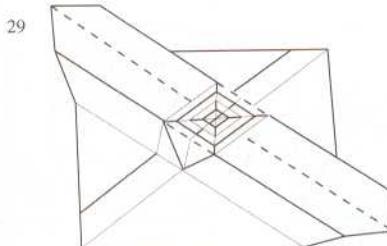
次図より拡大



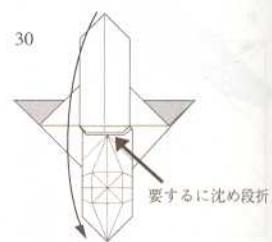
4等分の折り線を付け
半開きにする



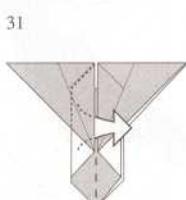
この図において細線で示した線を
次図では省略する



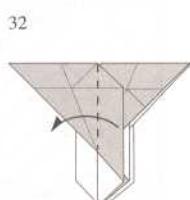
この図では太線を山折、細線を谷折とする
なお、----は本来は谷折を示す線であるが
この図においては山にも谷にも折らない線で
あることを示す



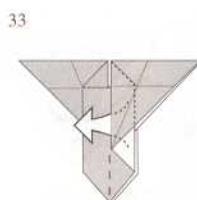
角を折り下げる



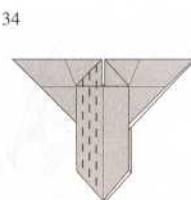
裏返すように引き出す
(上の方はClosed Sinkの要領)



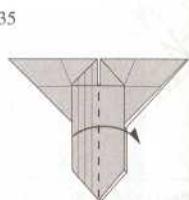
めくる



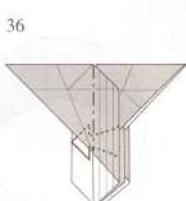
反対側も同じ
裏側も同じ



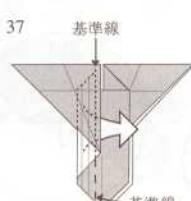
4等分



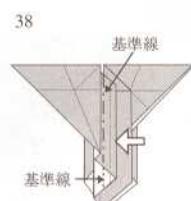
めくる



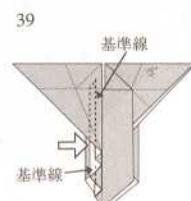
押し込む
(31の逆)



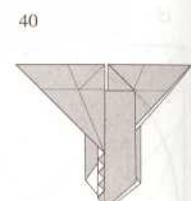
31の要領で裏返すように
引き出しが、基準となる
折り線は中心線より1つ
左側の折り線となる。



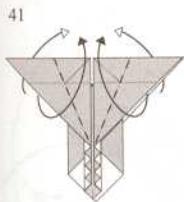
基準線に注意して
36の要領で裏返す
ように押し込む



基準線に注意して
37の要領で裏返す
ように押し込む



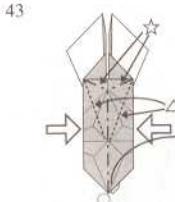
反対側も同じ
(34～39)



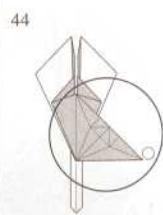
かぶせ折



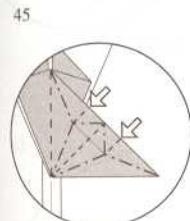
裏返す



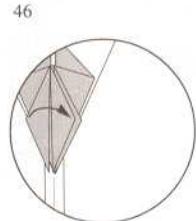
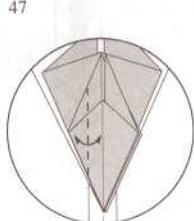
矢印の部分を凹ませながら
16の△で示した折線を山折にする。
この面からは見えないが、
△で示した線を外側から見て
山折にする。
☆で示した山折線はこの工程
で新たに付く線であるが紙を
ゆがみなくたためば自動的に
付く線である。
○の角が浮き上がってくるので
右側へたおす。



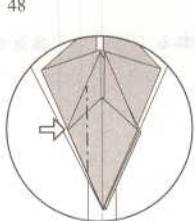
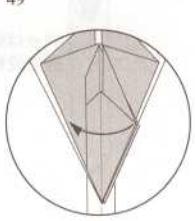
○の中を拡大



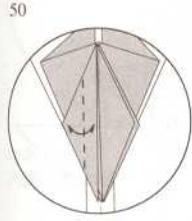
鶴の基本形をたたむ

めくる
(更に拡大)

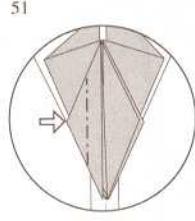
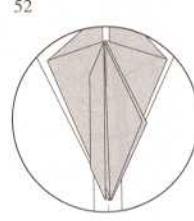
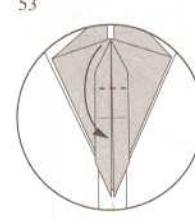
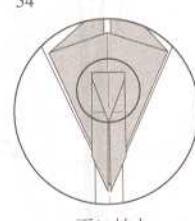
折り線を付ける

沈め折り
(open sink)

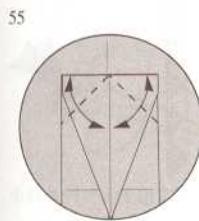
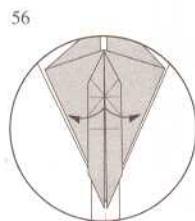
めくる



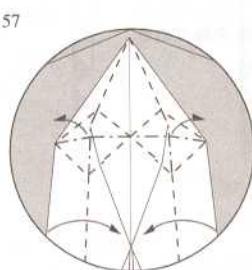
折り線を付ける

沈め折り
(open sink)反対側も同じ
(47~51)後ろの角に合わせて
角を折り下げる

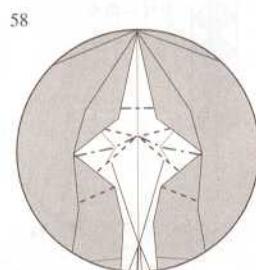
更に拡大

折り線を付ける
53の形に戻す

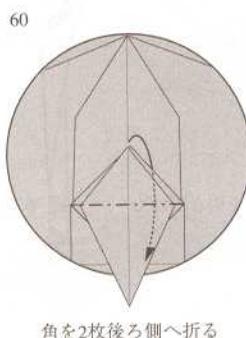
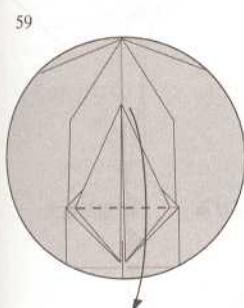
半開きにする



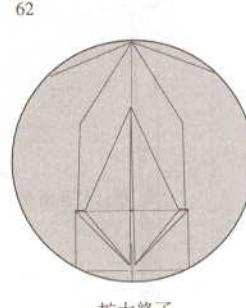
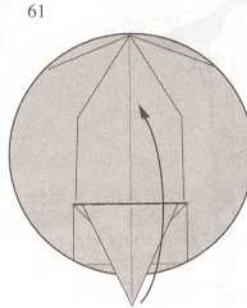
凹のひし形を凸にして閉じる



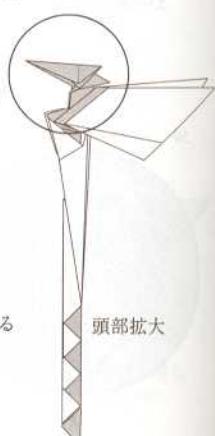
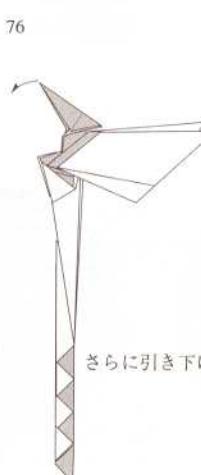
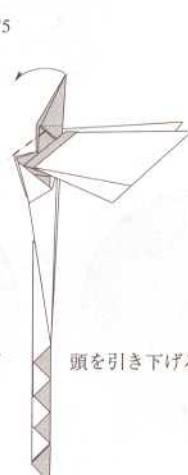
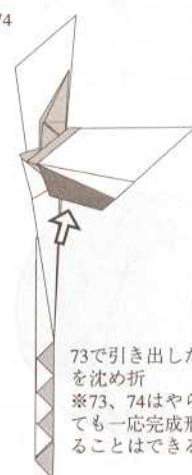
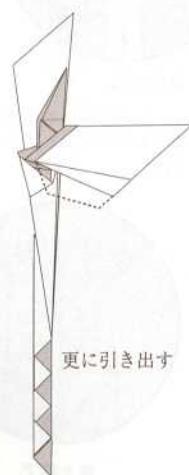
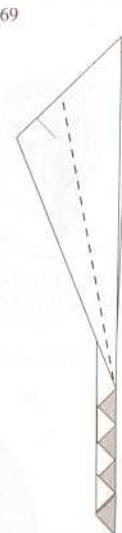
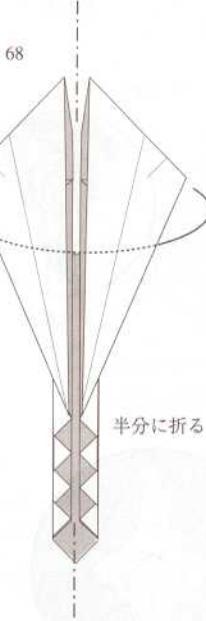
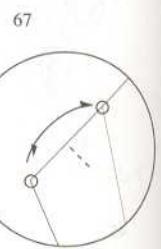
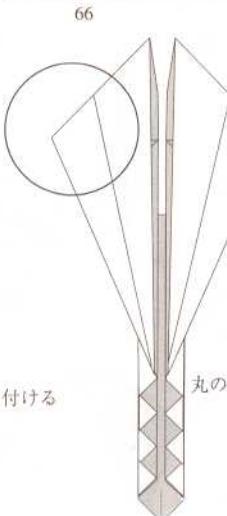
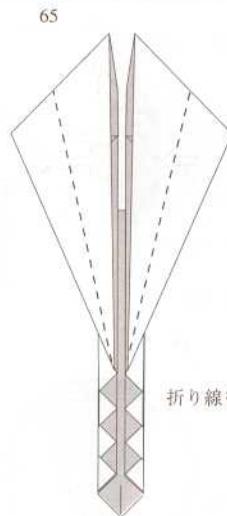
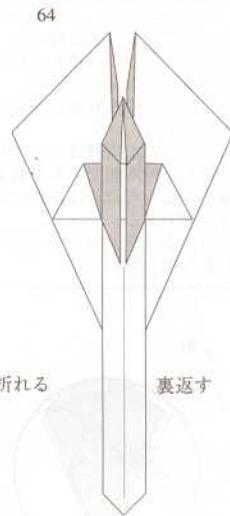
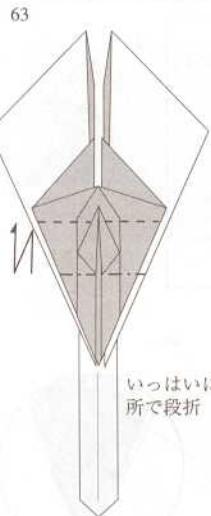
途中の図



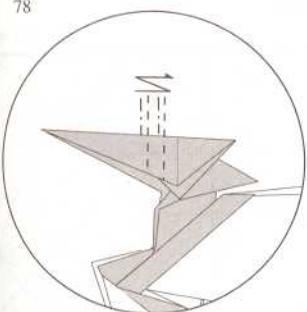
角を2枚後ろ側へ折る



拡大終了

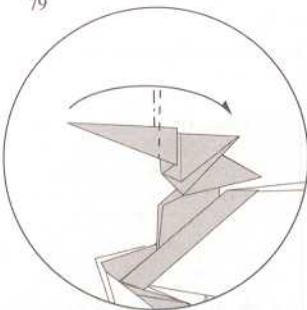


78



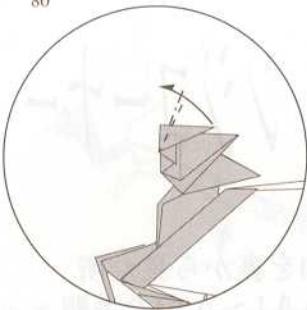
かぶせるように段折

79



かぶせ折

80

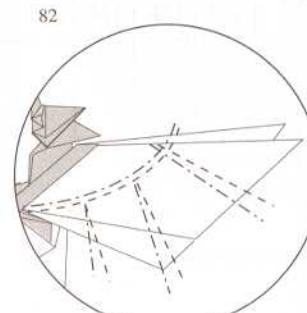


かぶせ折

81

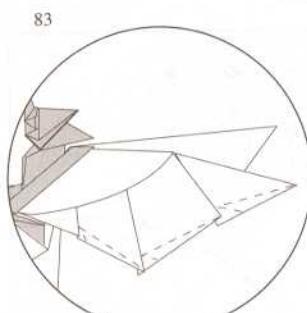
中わり折
次図は翼を拡大

82

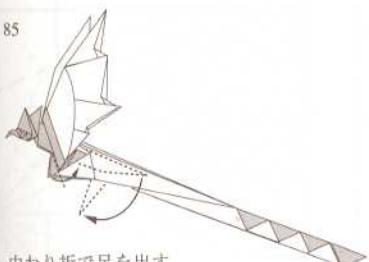


翼に表情を付ける

83

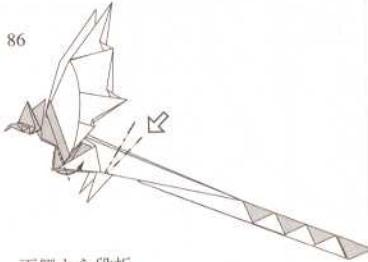


85



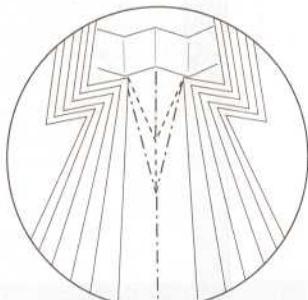
中わり折で足を出す

86

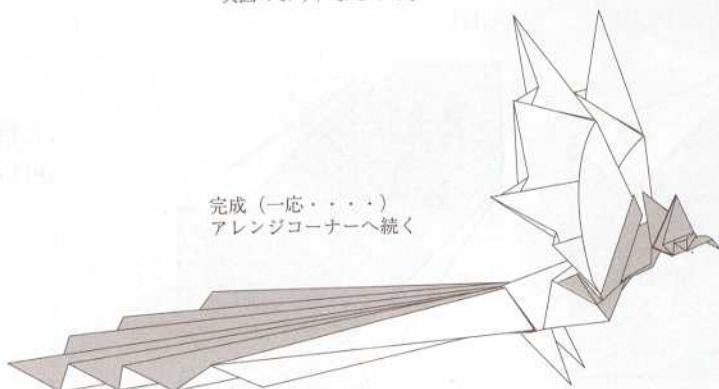


両側から段折
矢印の方から見ると13層あるが手前側から6層
向こう側から6層づつ段折をする。
真ん中の層は、どちらか片側に寄せるか凹ませて
次図のようにまとめる。

86.5

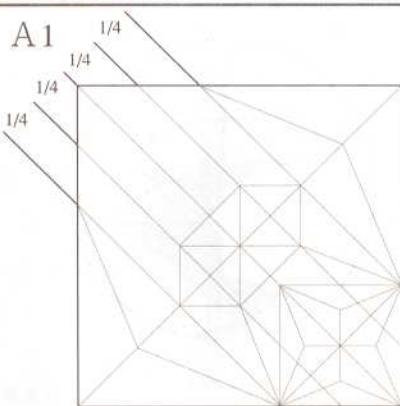


完成(一応……)
アレンジコーナーへ続く

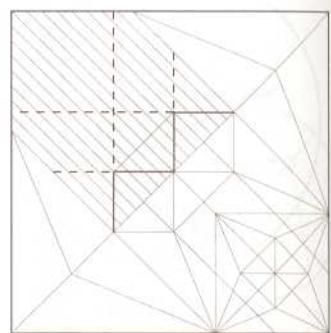


アレンジコーナー

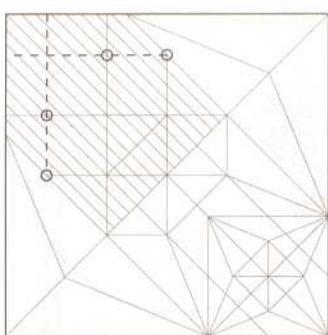
図20を裏から見た所
からA1～A10の手順
で折り線を付ける。



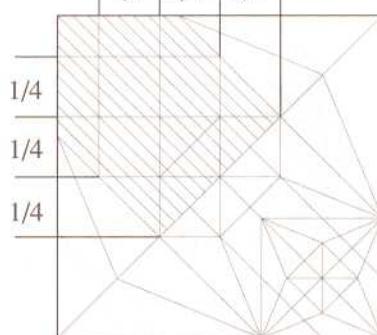
A2



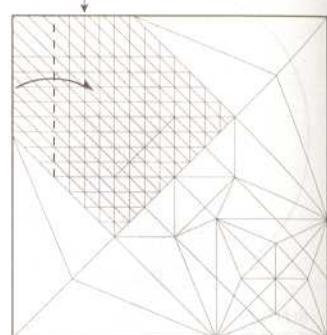
A3



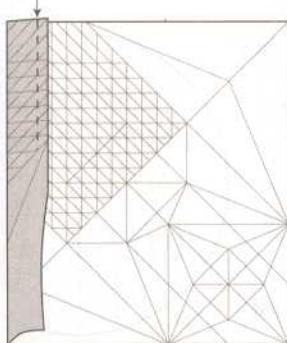
A4



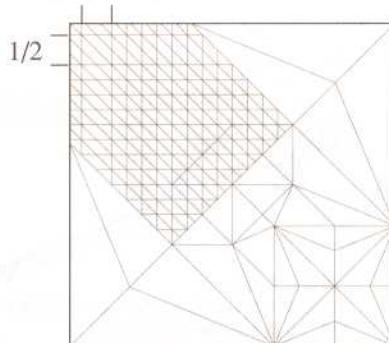
A5



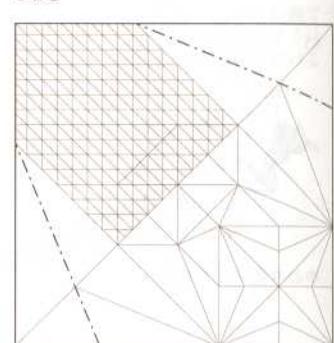
A6



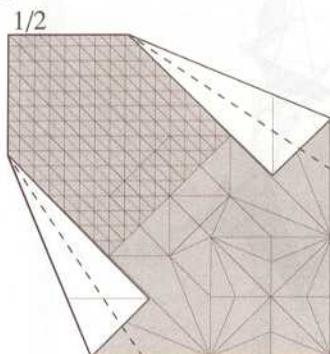
A7



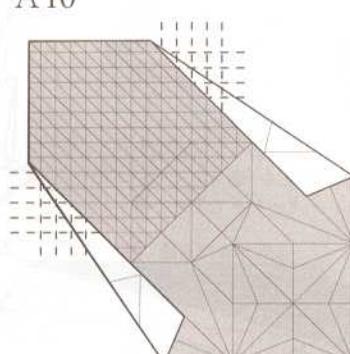
A8



A9

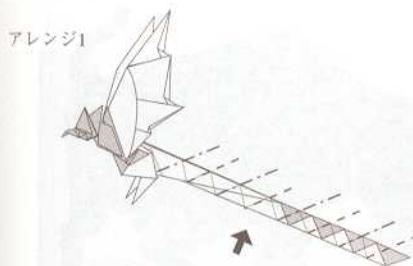


A10

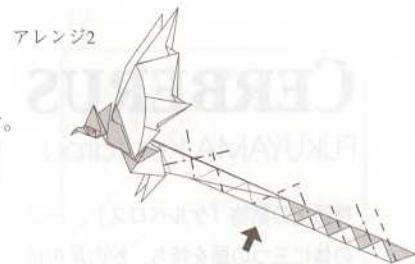


A11

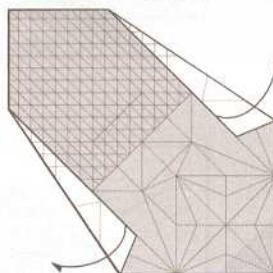
工程20～85まで
同様に折る。



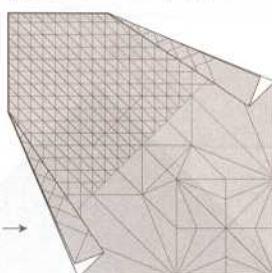
開いた中割折り（Opensink）を繰り返す。
図に示される折線は、尾を半開きにし
矢印の方から見てつながっている線を
全て山（もしくは谷）にする。



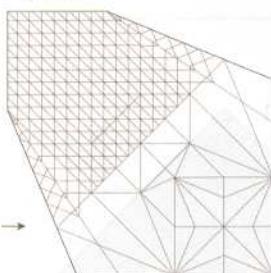
実際には尾の部分のみを半開きにして作業します



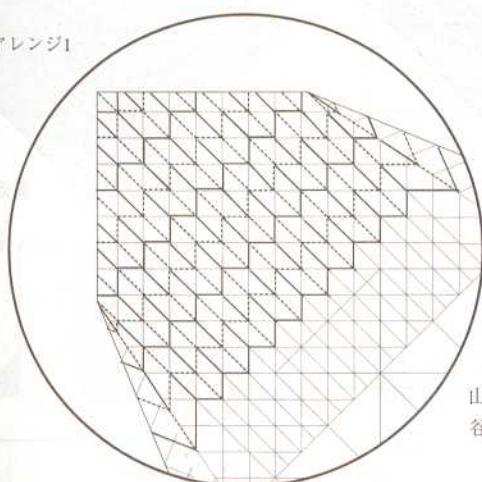
工程A10を次図のよう開いて



次図では裏返す

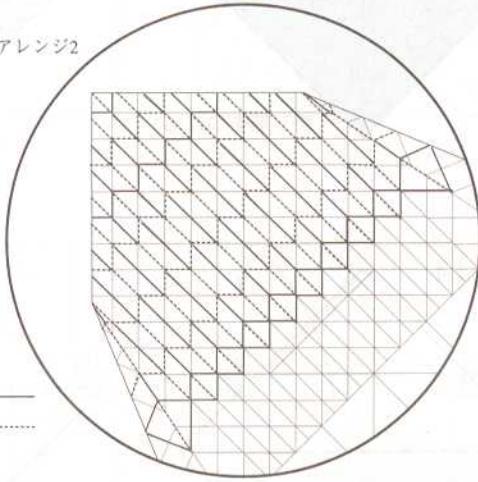


アレンジ1

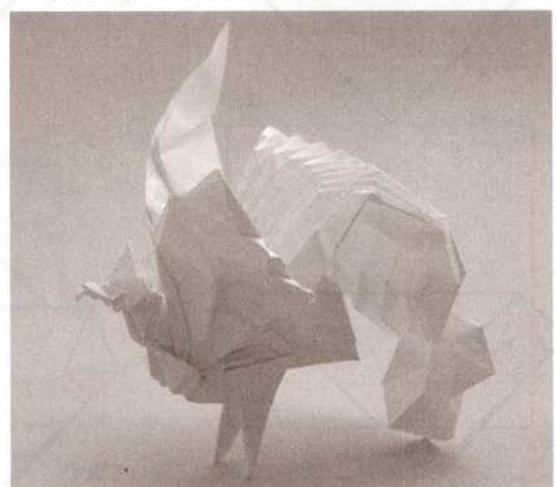
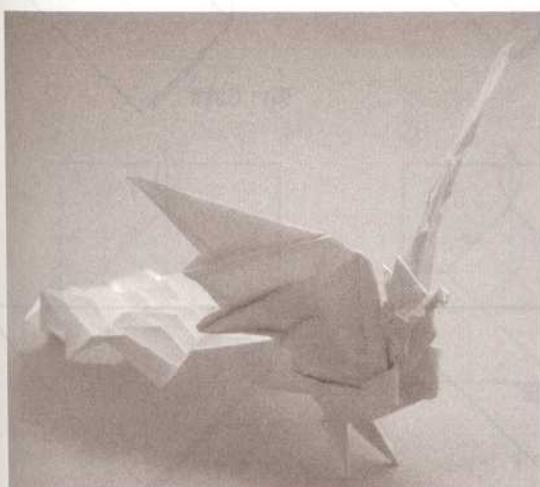


アレンジ1

アレンジ2



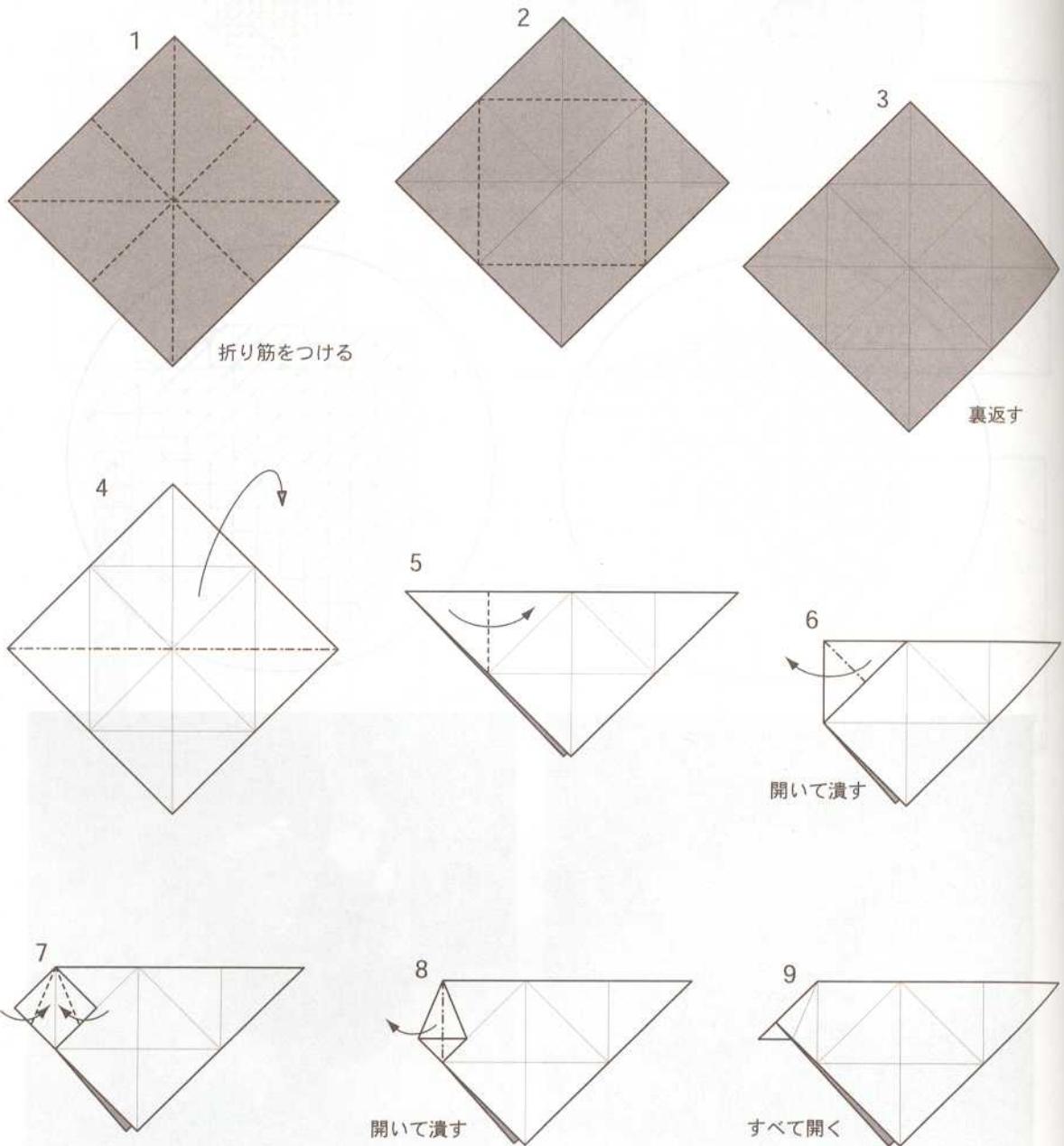
アレンジ2



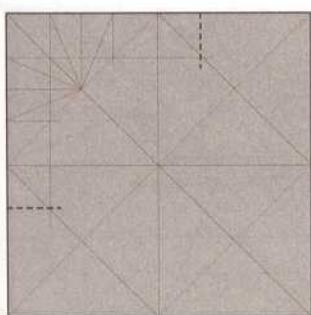
CERBERUS

FUKUYAMA Kentarou

神話上の動物「ケルベロス」。一つの体に三個の頭を持ち、蛇の尾を持つ犬。地獄の番犬。

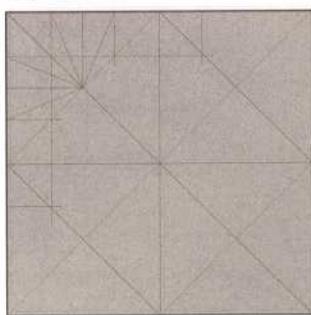


10



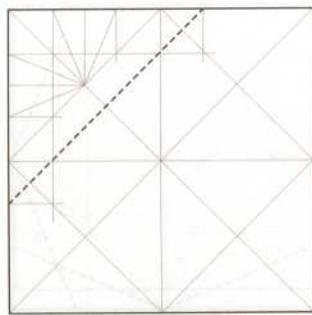
折り筋をつける

11



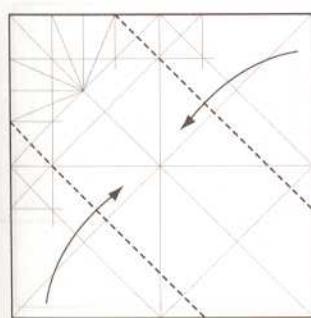
裏返す

12

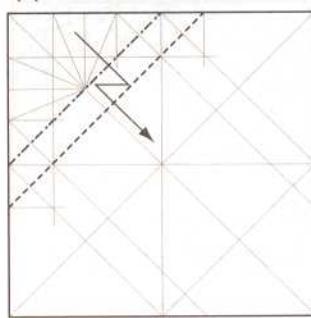


ひきこまねり

13

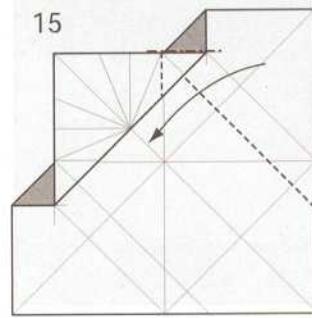


14

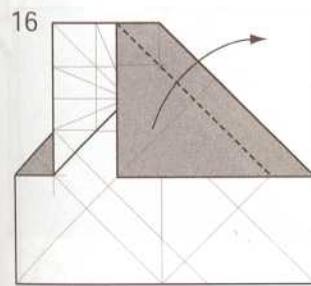


段折り

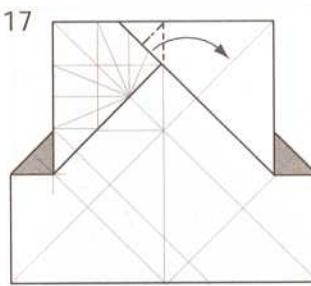
15



16

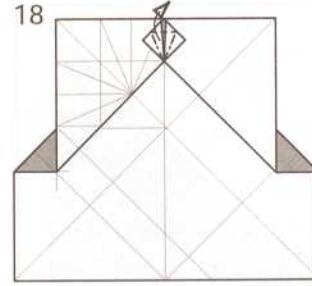


17



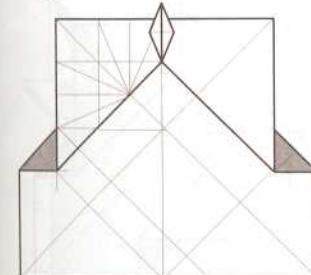
開いて潰す

18



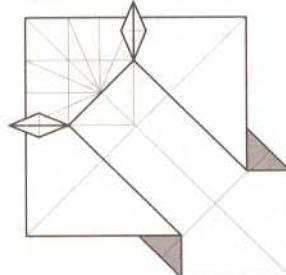
開いて潰す

19



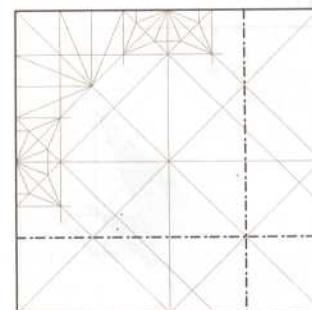
反対も15~19と同じ

20

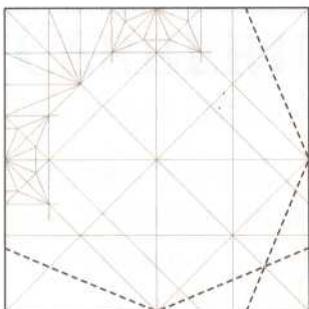


すべて開く

21

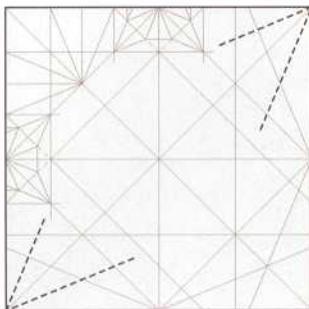


22

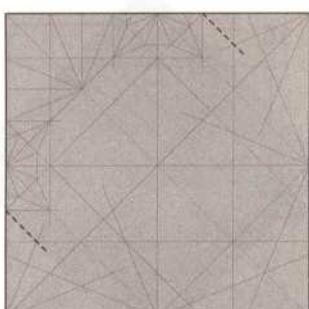


折り筋をつける

23

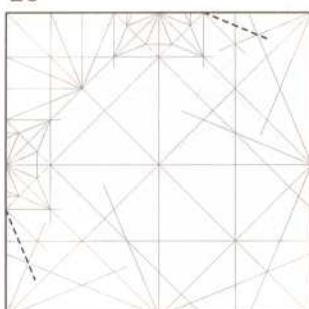


25

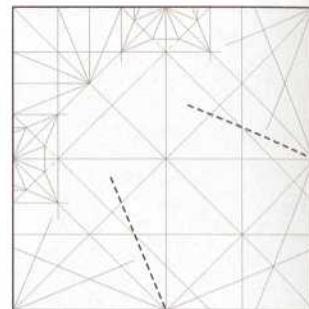


裏返す

26

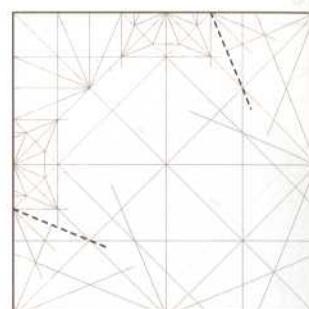


24

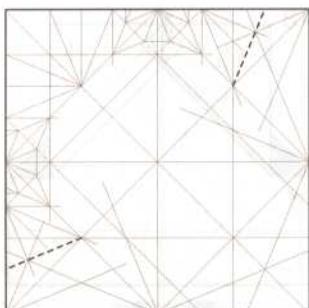


裏返す

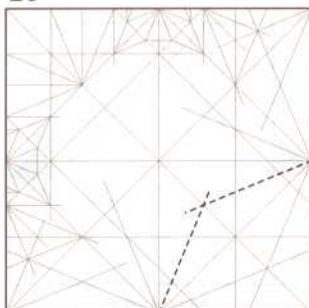
27



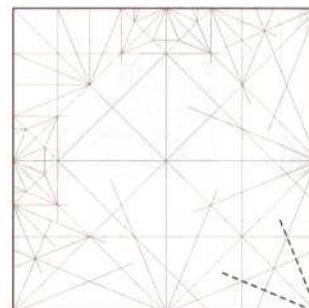
28



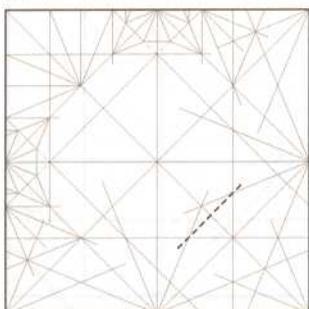
29



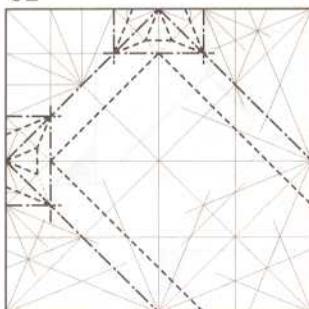
30



31

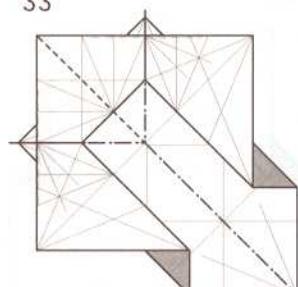


32



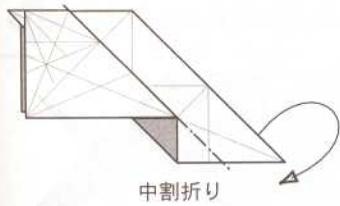
折り筋に沿って折り畳む

33

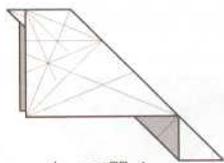


折り筋に沿って折り畳む

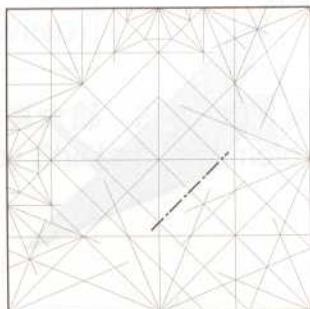
34



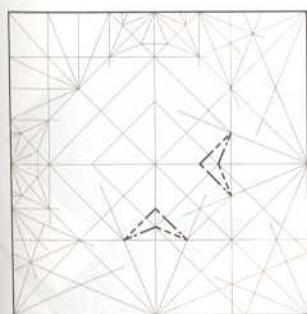
35



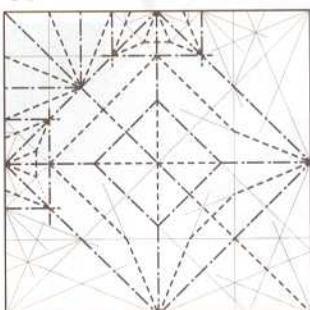
36



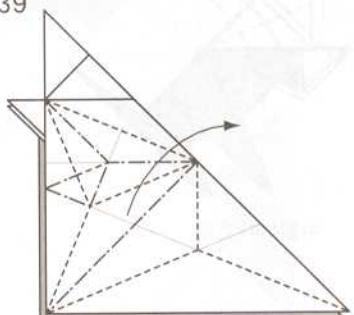
37



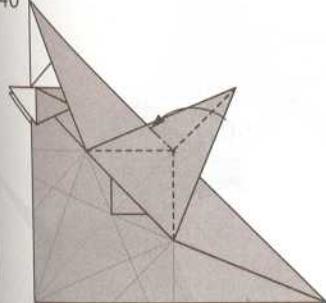
38



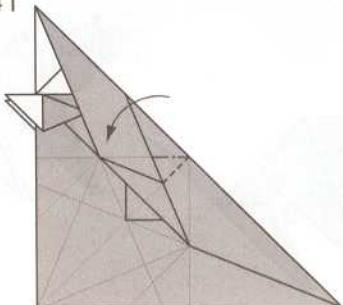
39



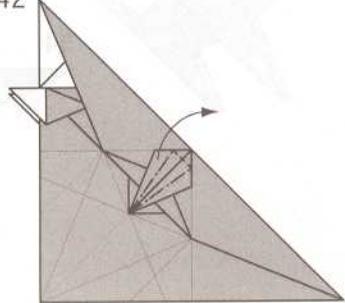
40



41



42

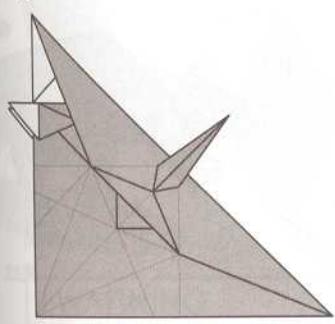


つまむ様にして折る

中割折り

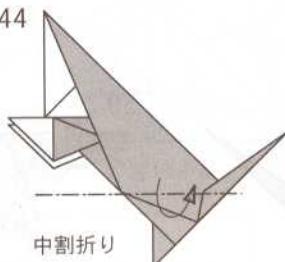
ひらいて潰す

43



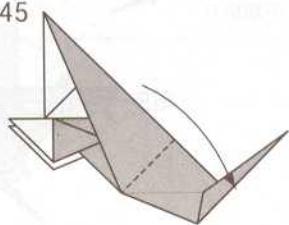
反対も39~42と同じ

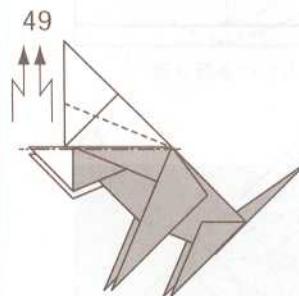
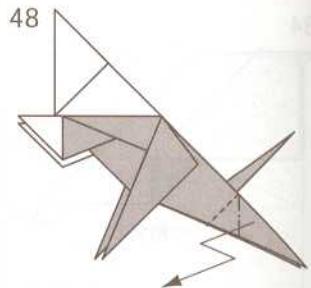
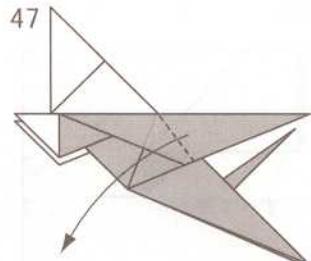
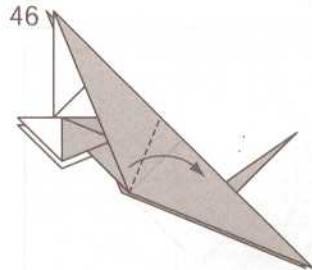
44



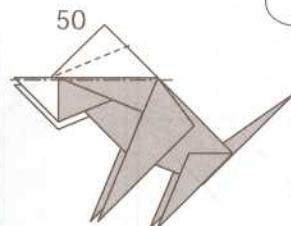
中割折り

45

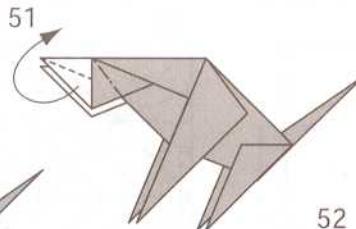




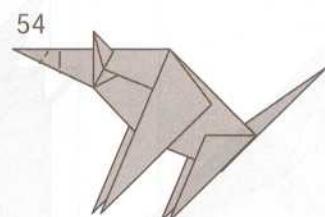
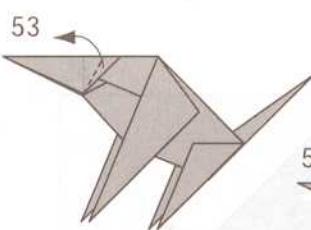
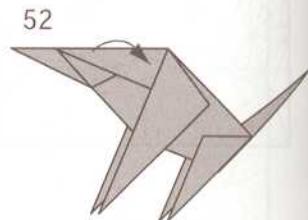
中割折り二回



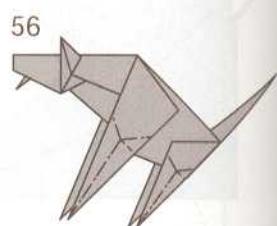
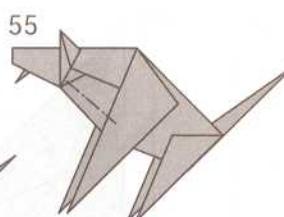
中割折り二回



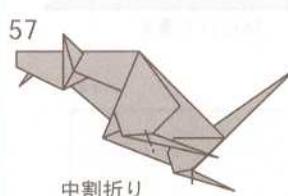
中割折り



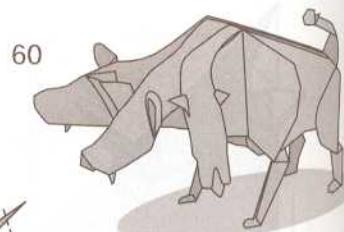
中割折り二回



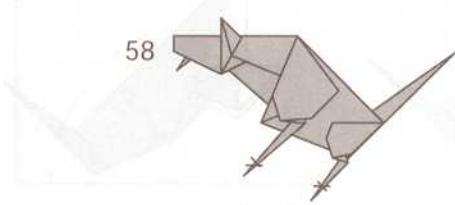
つまみ折り



中割折り



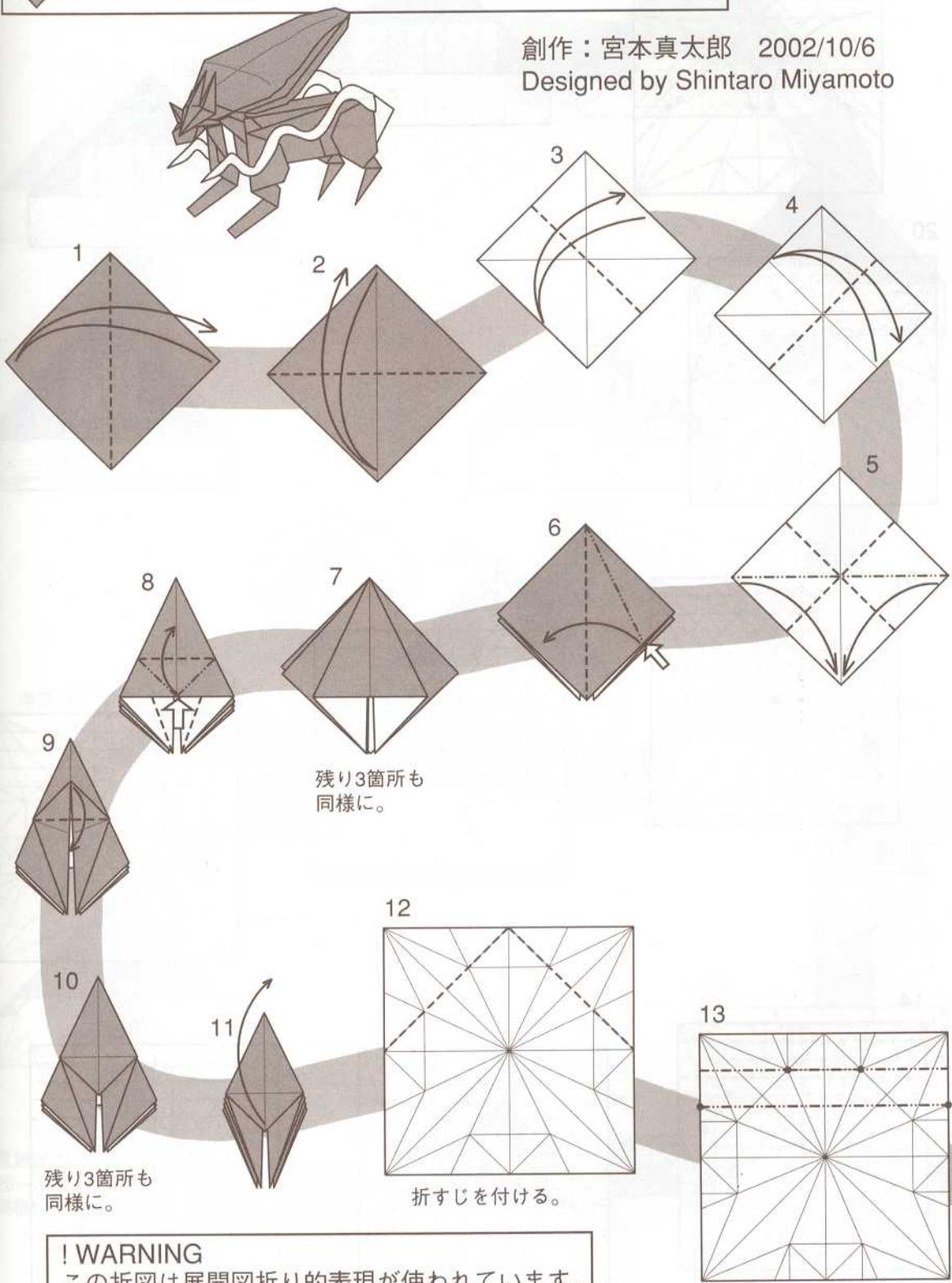
完成



中割折り二回

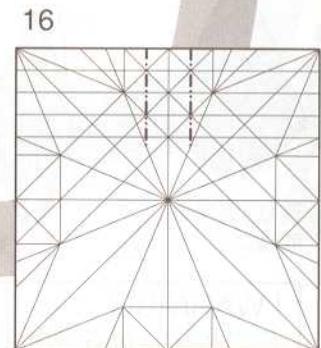
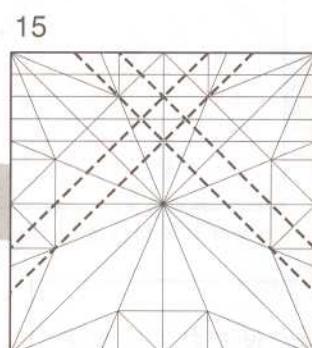
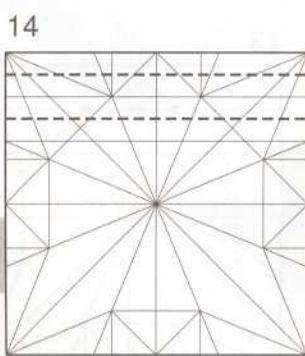
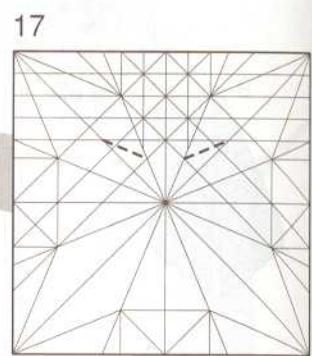
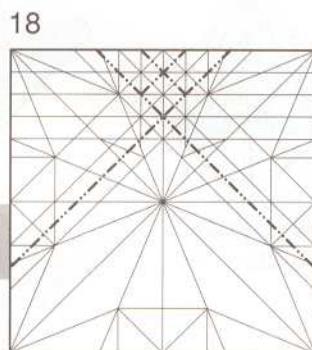
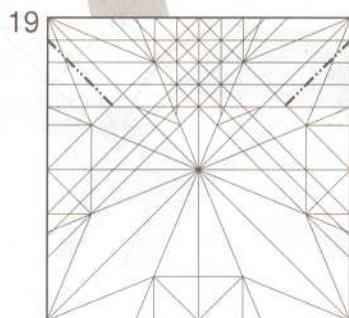
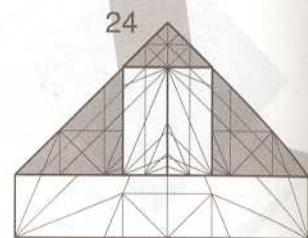
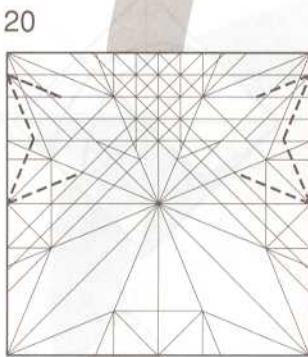
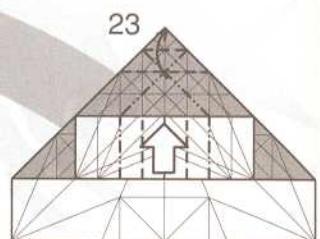
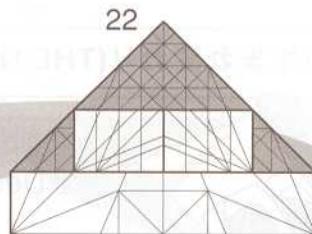
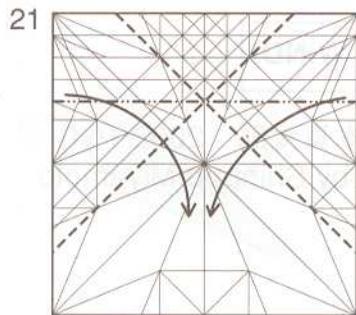
 GSC.No.245: 北風の生まれ変わり(THE NORTH WIND)

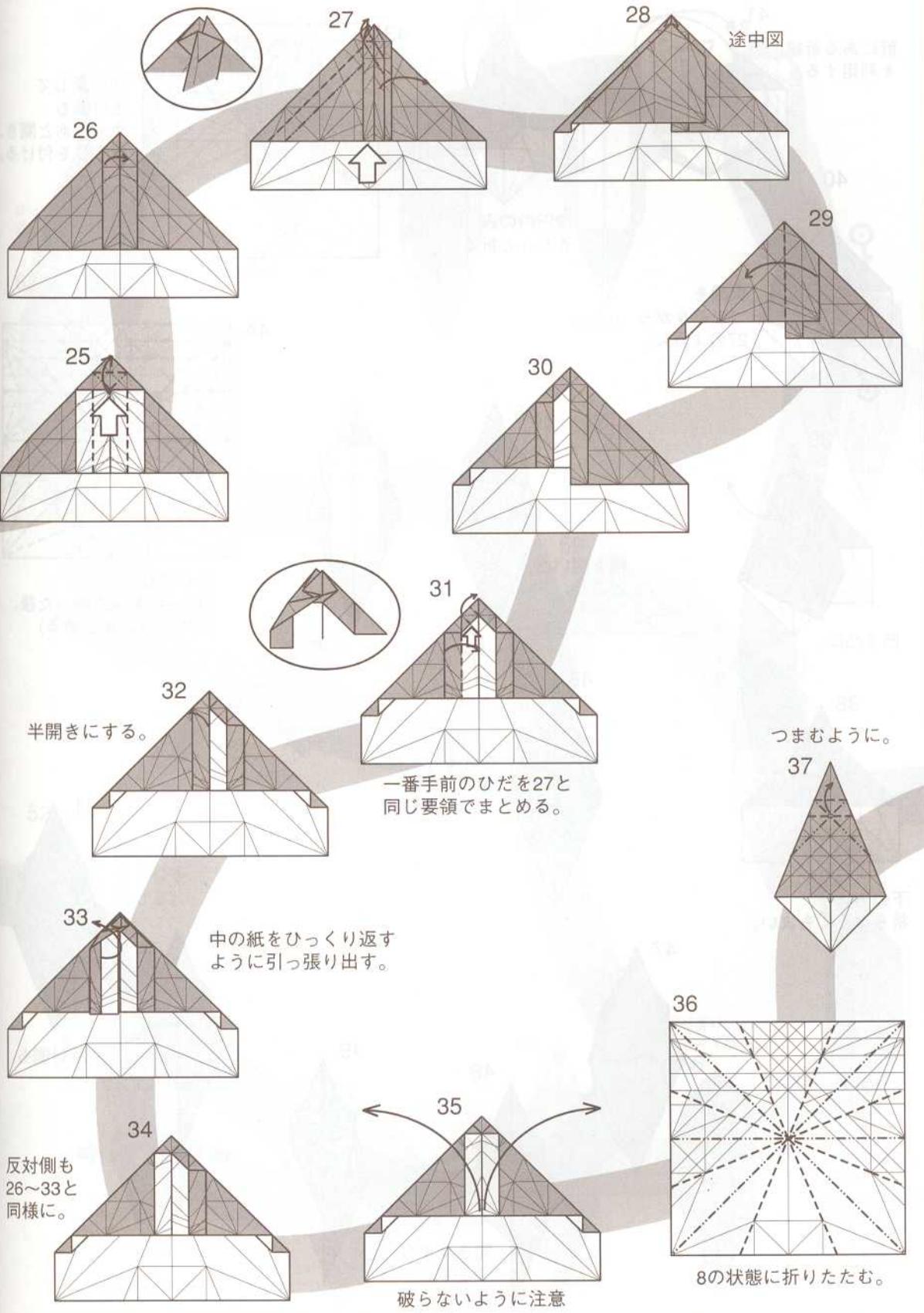
創作：宮本真太郎 2002/10/6
Designed by Shintaro Miyamoto

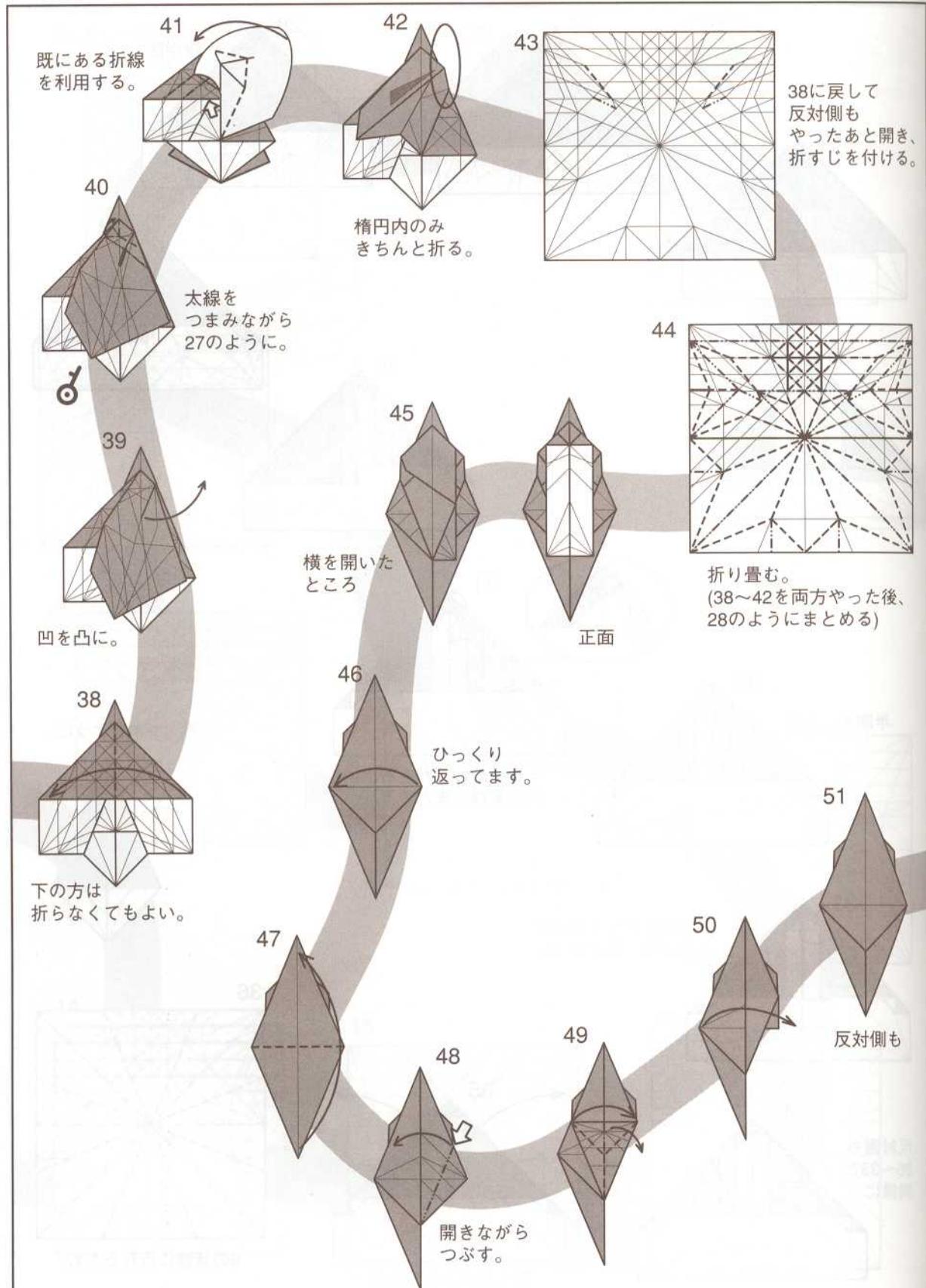


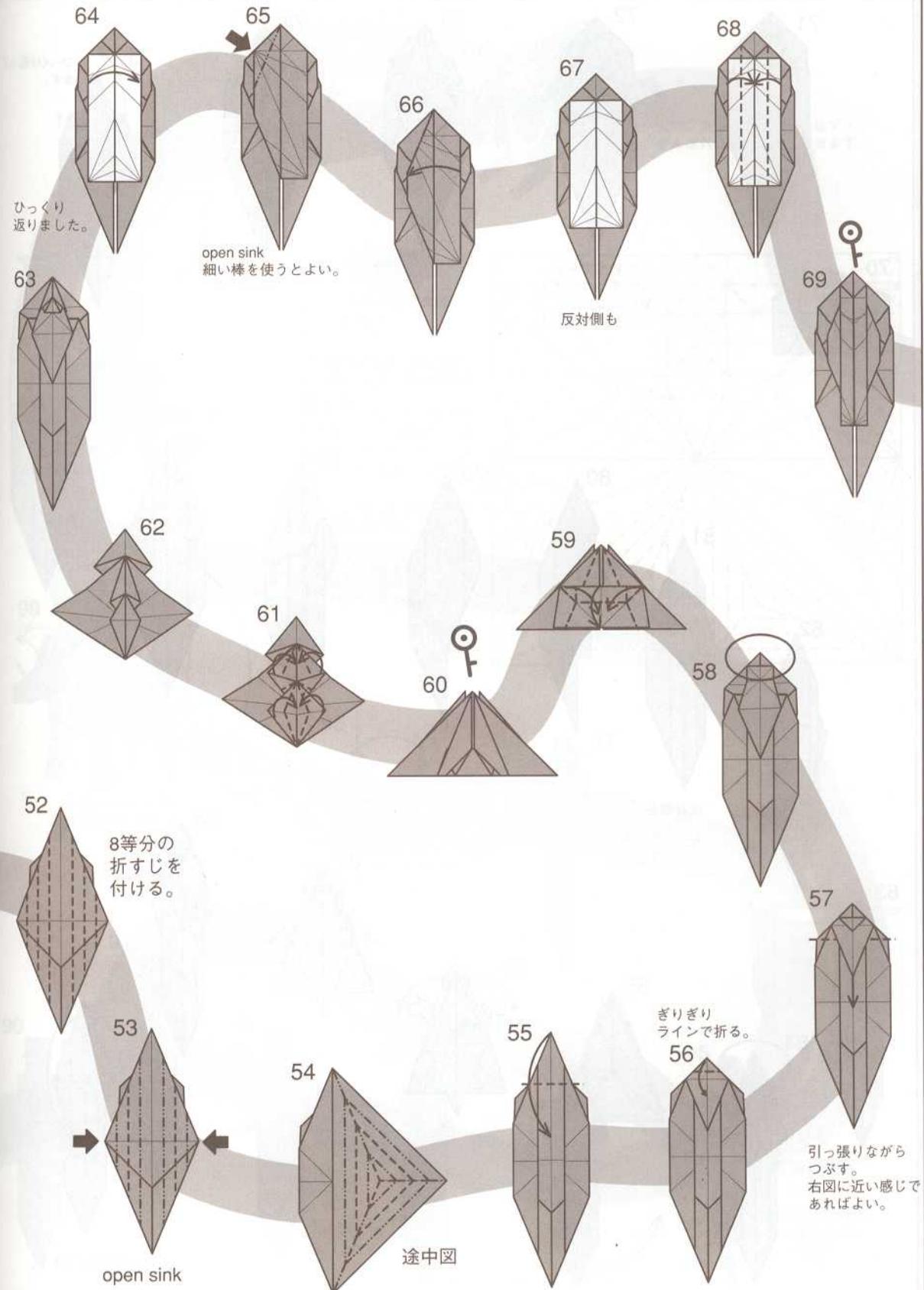
! WARNING

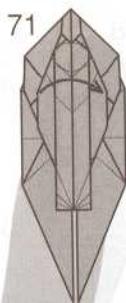
この折図は展開図折り的表現が使われています。



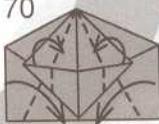








70



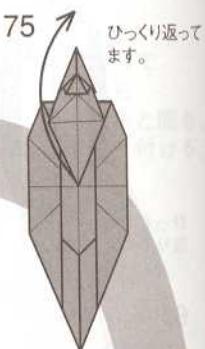
72



73



74

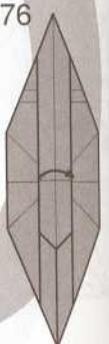


75

ひっくり返って
ます。

反対側も。

76



70

この状態で平面に
なっていないくとも
気にしない。
つぶしながら折る。

80



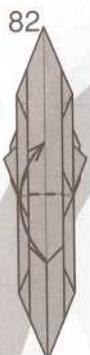
77



78



79



82



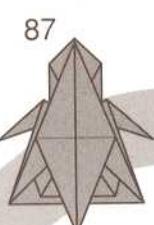
81

反対側も

83



86



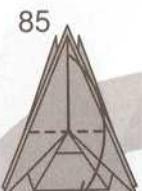
87



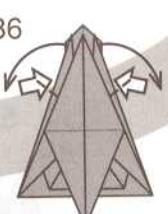
88



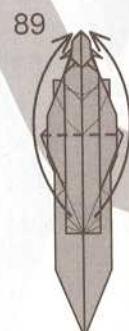
84



85



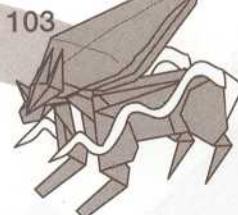
86



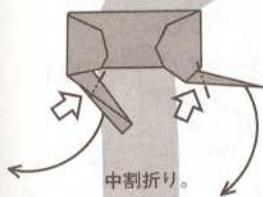
89

ひっくり返ってます。

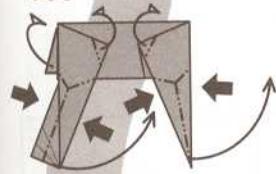
102



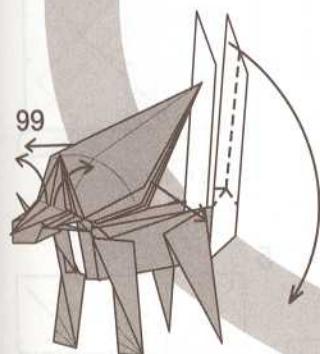
101



100



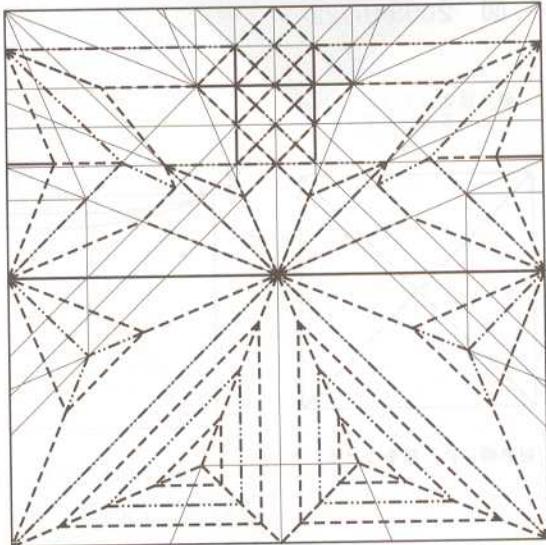
99



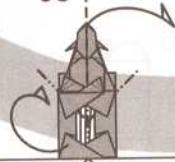
展開図

これを折ると55になります。

この作品は大きい紙でなくとも折れます。(私の最小記録は7.5cm)。
展開図からまとめる部分が実力不足のため表現できませんでした。申し訳ありません。(後半は特にめちゃくちゃ)
この図で折れたひとはかなりの実力派です。



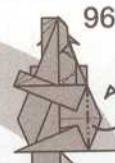
98



97

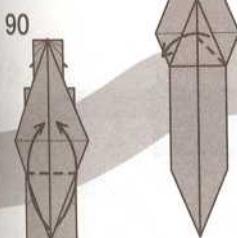


96

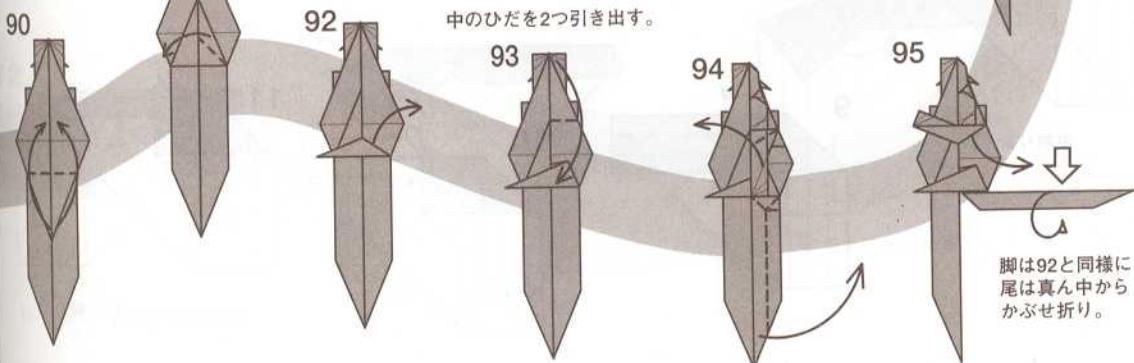


差し込むように折る。

91



中のひだを2つ引き出す。

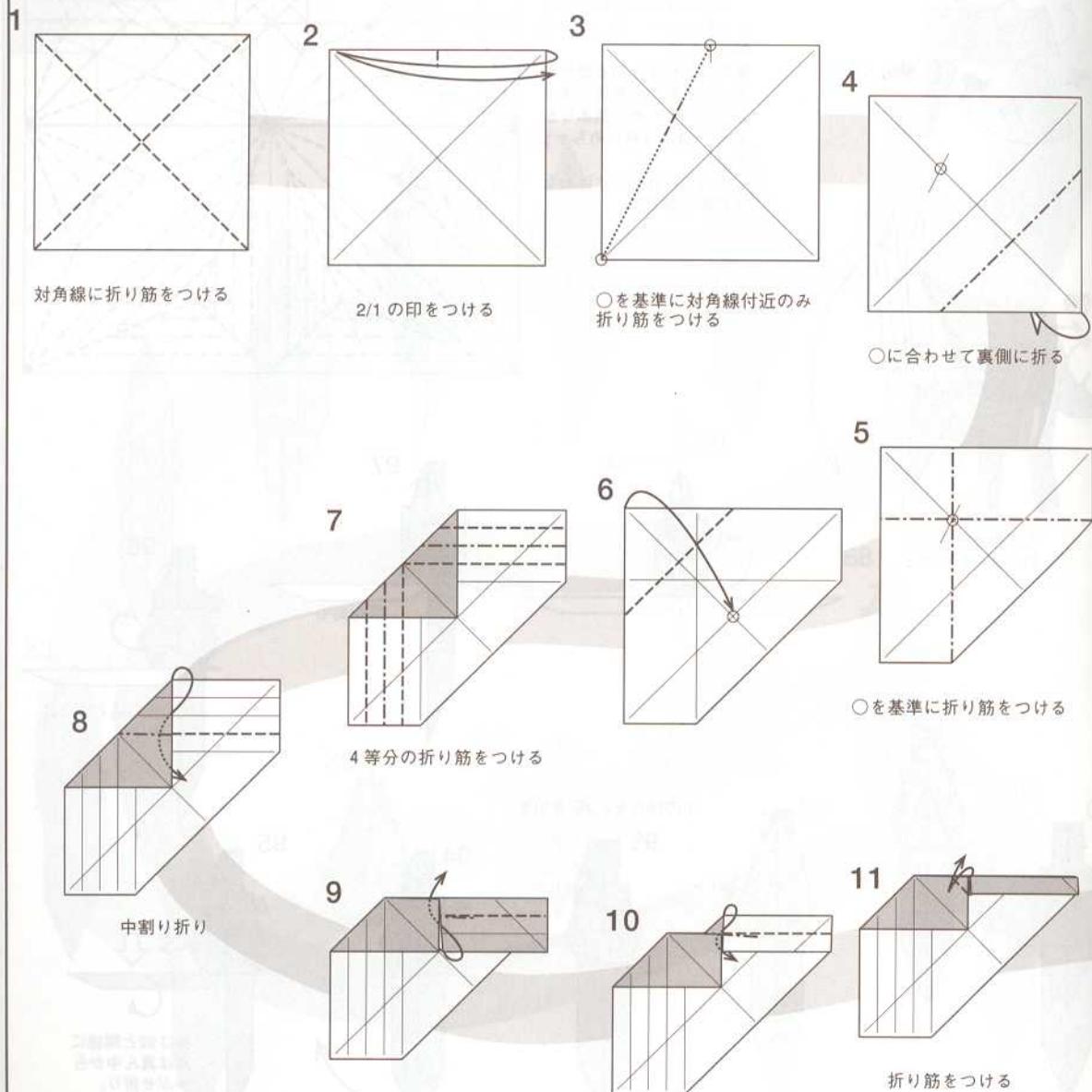
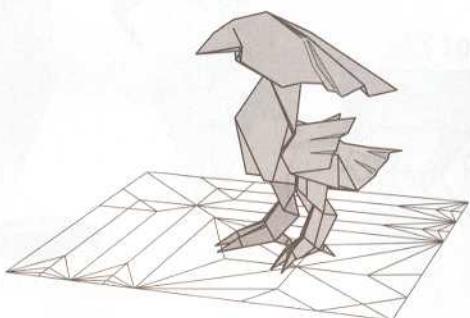


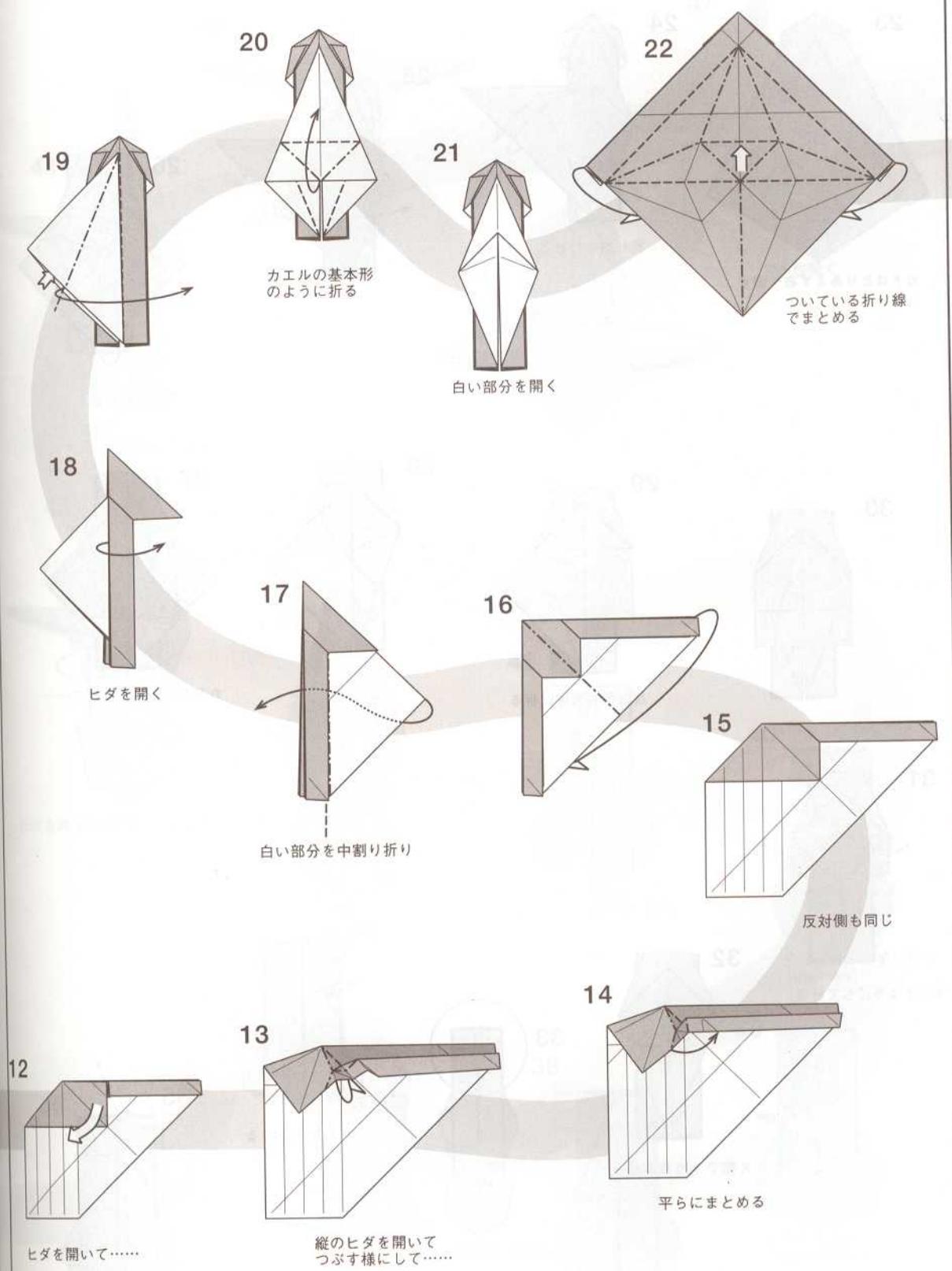
脚は92と同様に尾は真ん中からかぶせ折り。

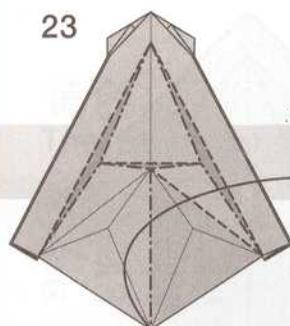
黄色い鳥

The Yellow Bird

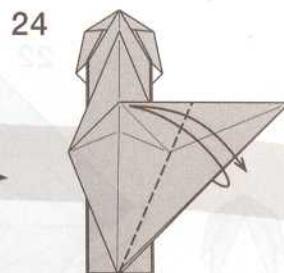
神谷哲史
Satoshi Kamiya
作 2001/12/09
図 2003/07/22



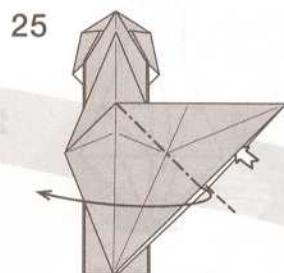




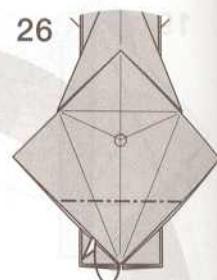
カドはとりあえず右へ倒す



折り筋をつける

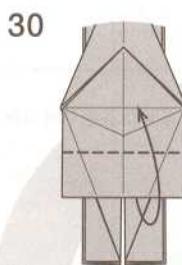


25

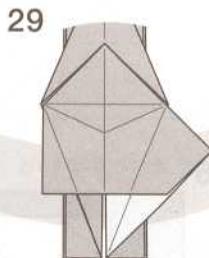


26

裏側に折り込む



30



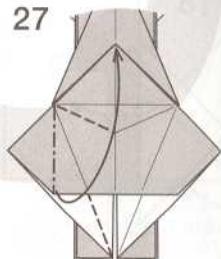
29



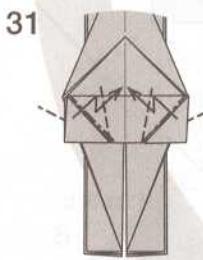
28

戻す。

27

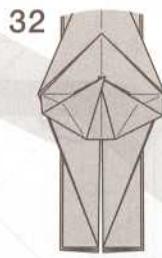


カドを引っ張り上げて……



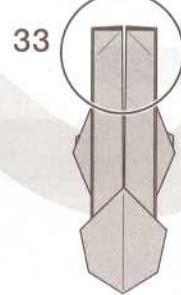
31

反対側も同様に折る



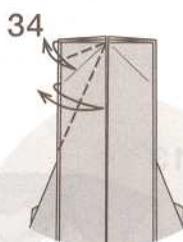
32

ずらすようにして折る



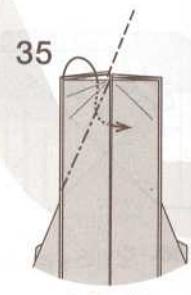
33

X軸で180度回転



34

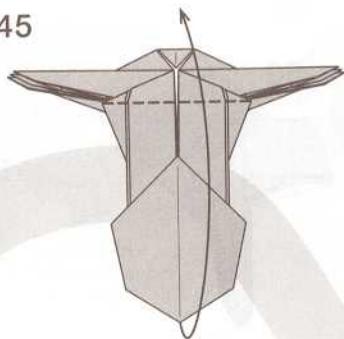
折り筋をつける



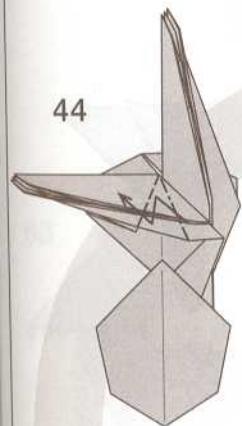
35

中割り折り

45

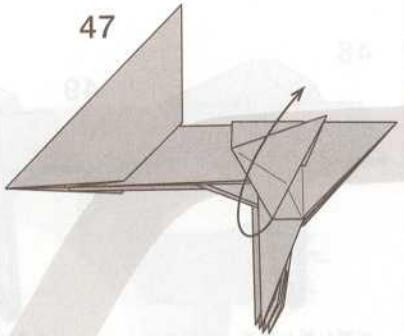


44



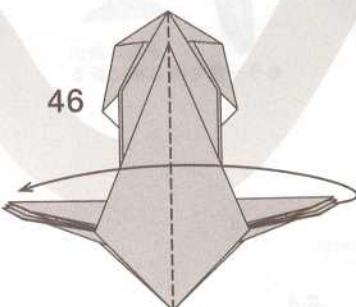
ついている線で
段折りするように
折りたたむ

47

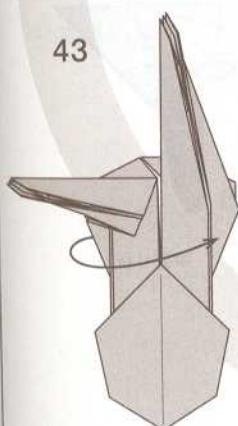


1枚開く

46

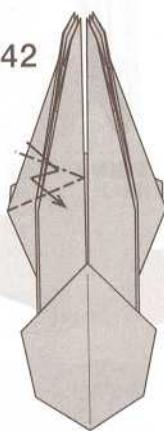


43



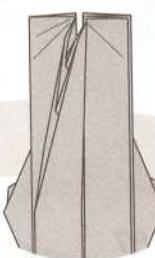
ヒダ3枚を反対側へ
引き出す

42



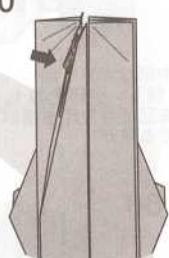
段折り

41



他の3ヶ所も
34-40と同様に
折る

40



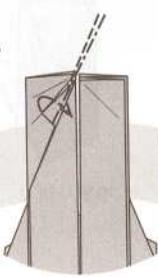
先の部分もしすめ折り
(opensink)

36



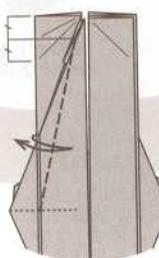
中割り折り

37



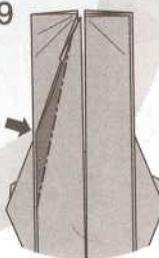
中割り折り

38

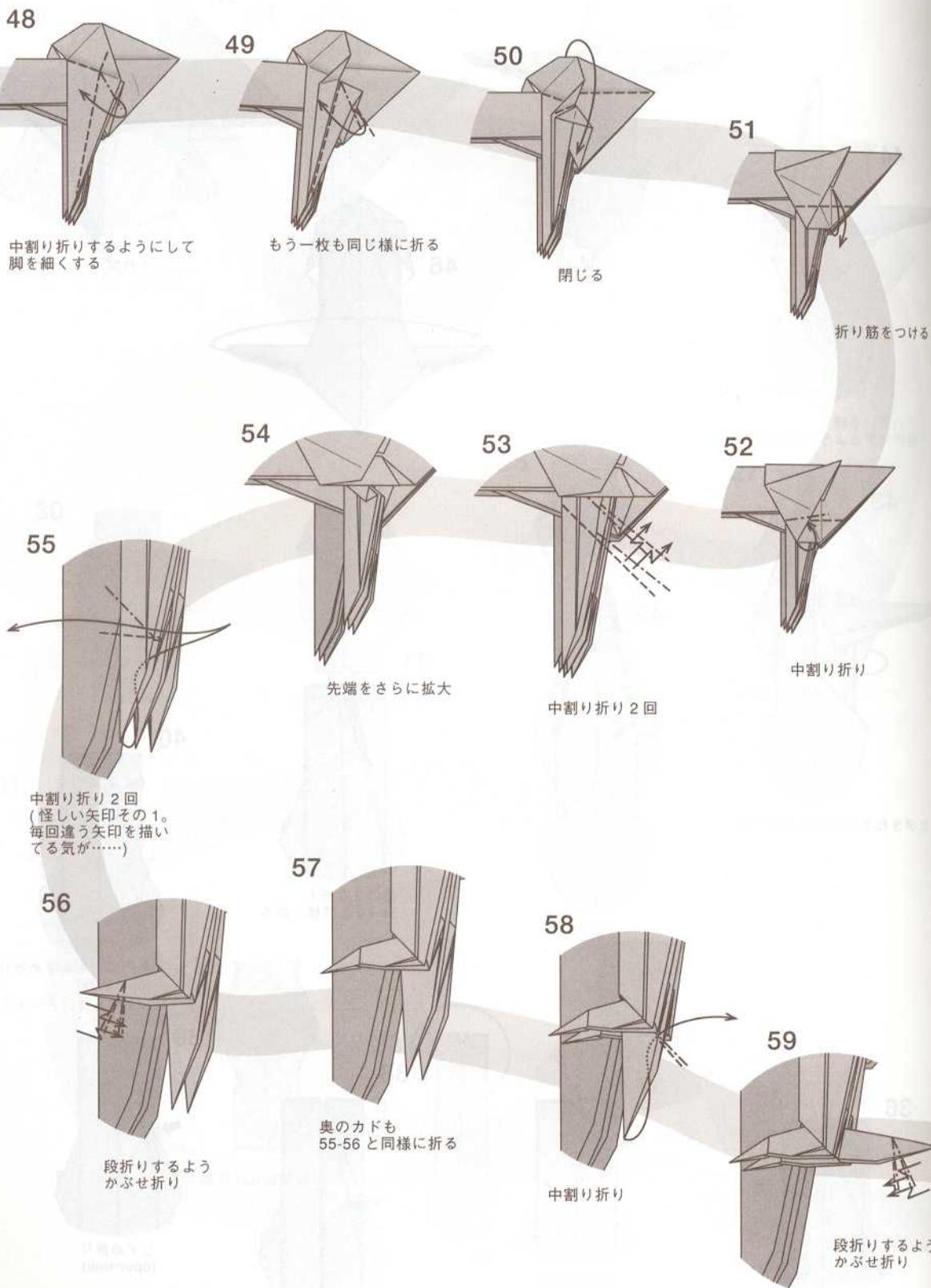


折り筋をつける

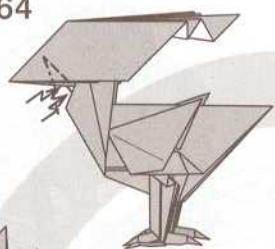
39



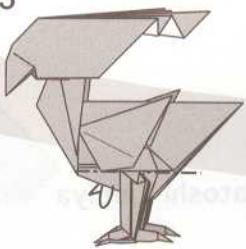
しすめ折り
(opensink)



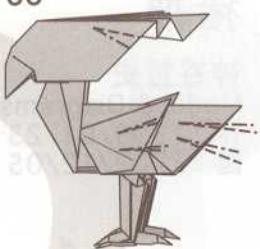
64



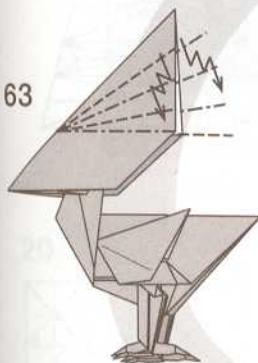
65



66



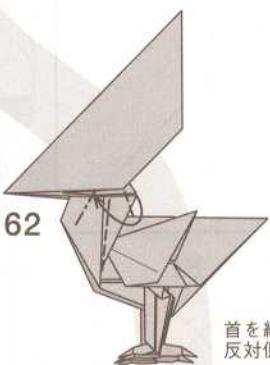
63



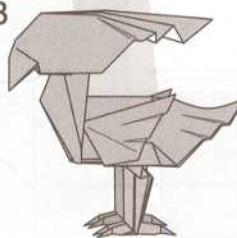
67



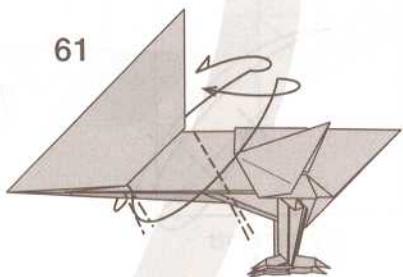
62



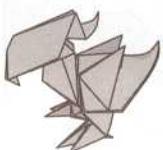
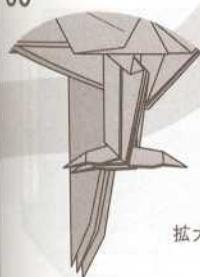
68



61



60



有名 RPG より。
元の題材は 2D の頃のアイコン状の
物で(左図)、この作品はそれをさら
に折り込んだものです。

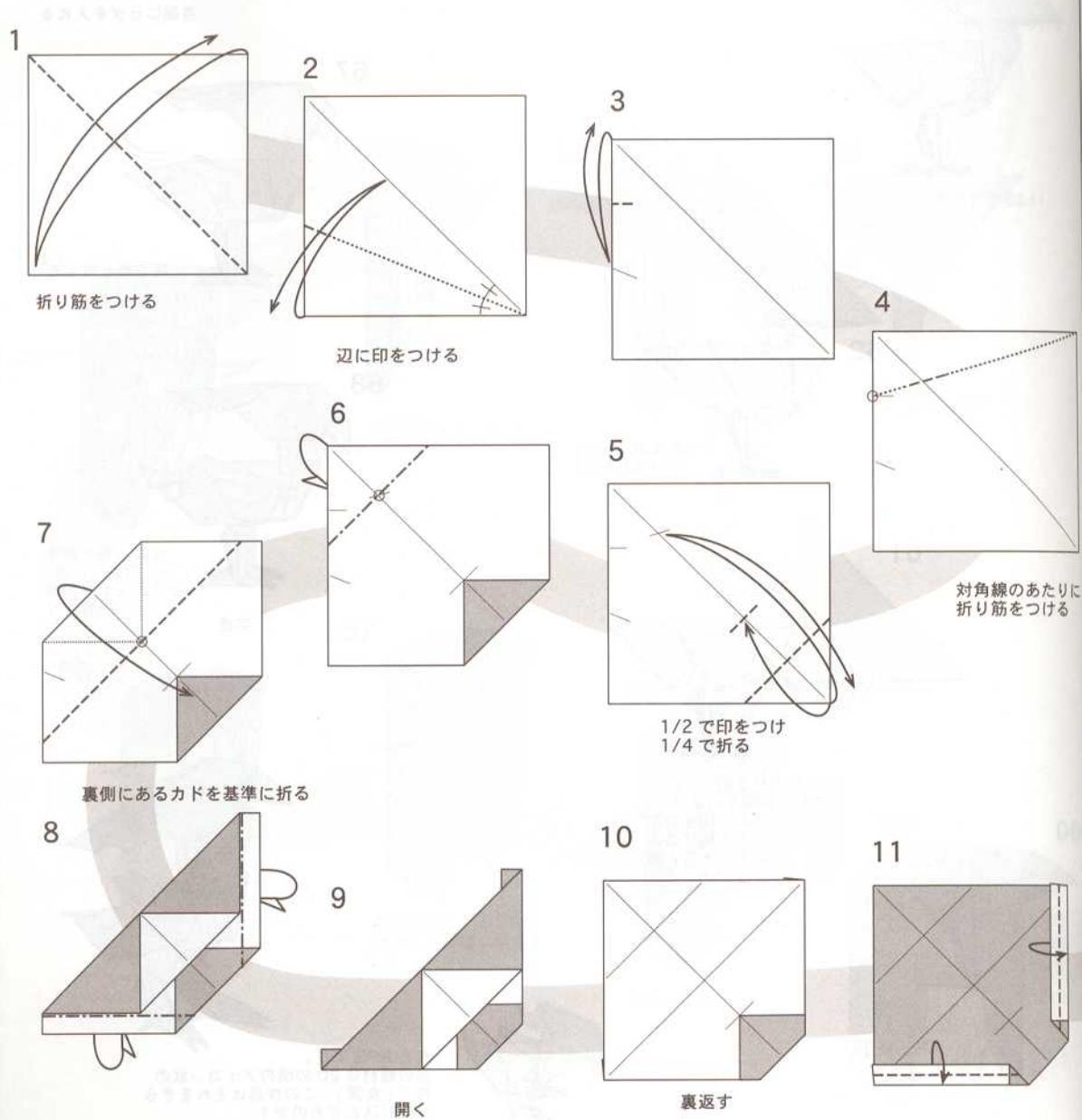
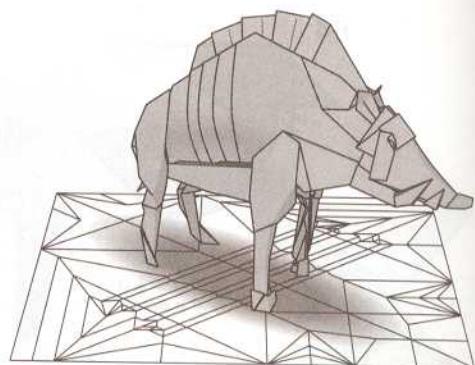
猪神

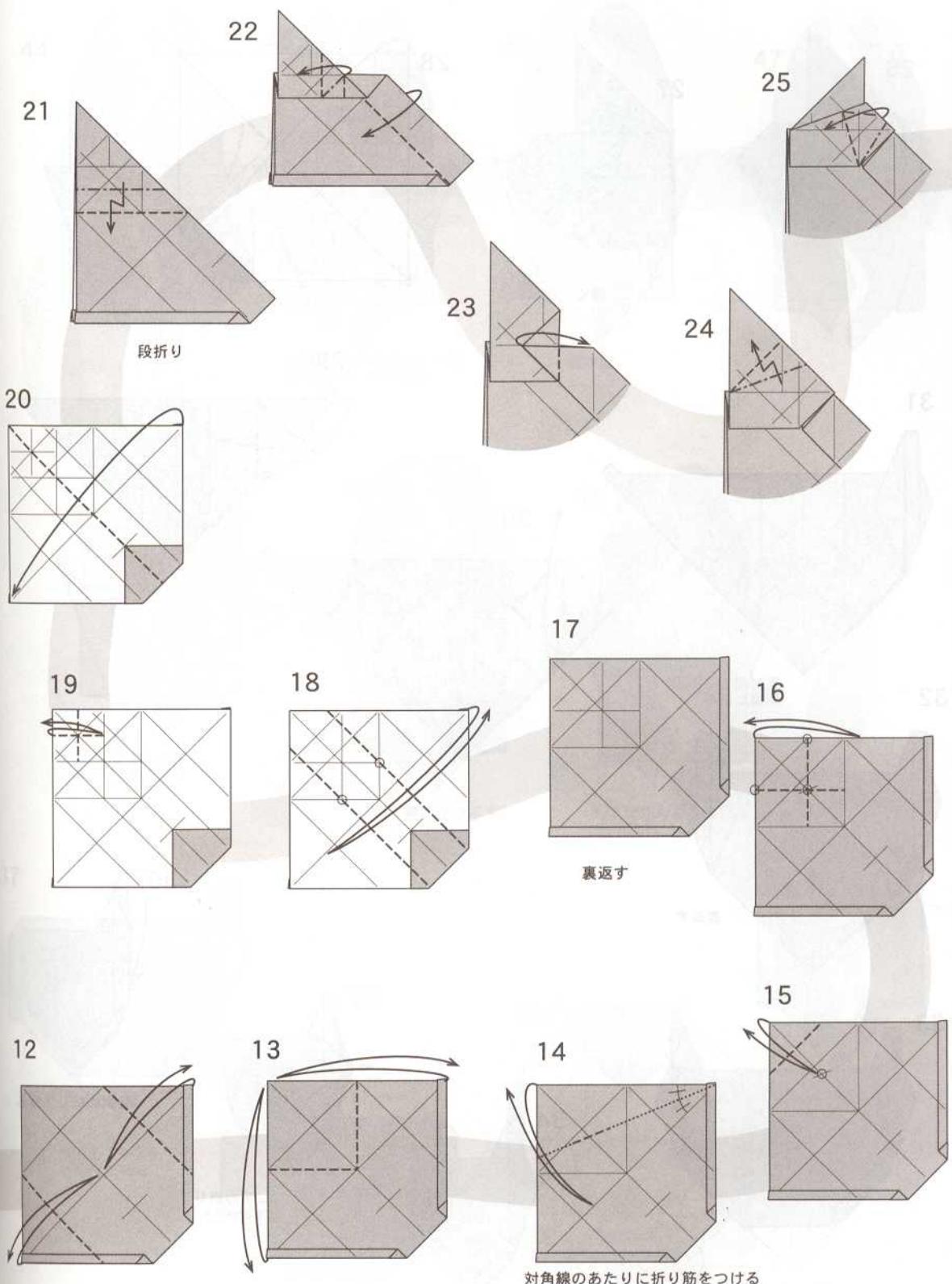
神谷哲史

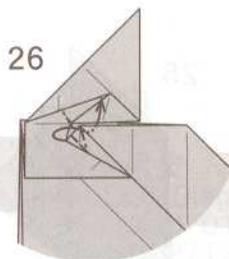
Model & Diagrams by Satoshi Kamiya

作 1999/01/23

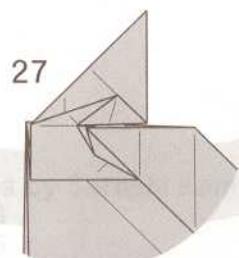
図 2002/12/05



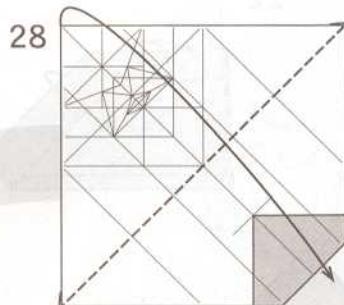




26

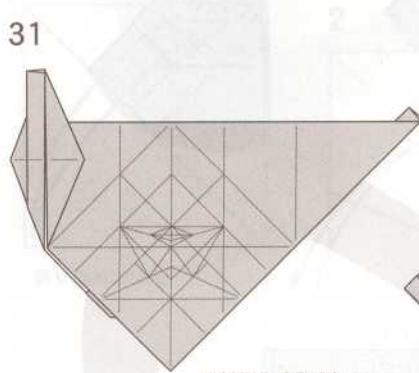


27

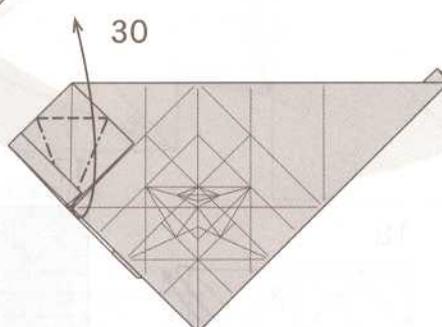


28

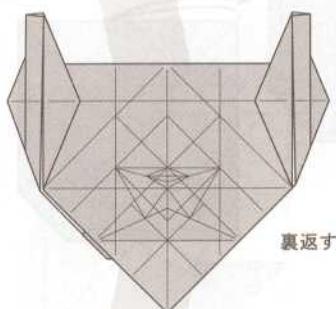
開く



31

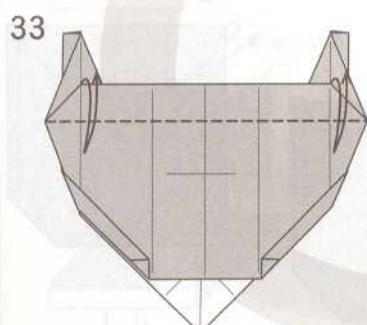


30

反対側も 29-30 と
同様に折る

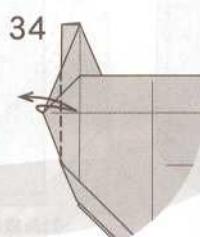
32

裏返す



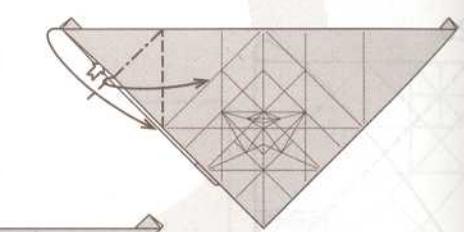
33

折り筋をつける

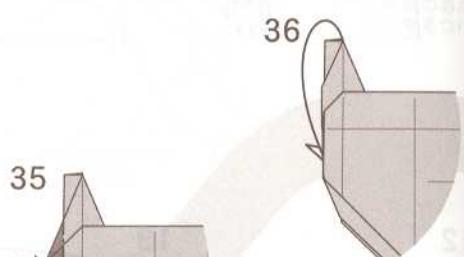


34

折り筋をつける

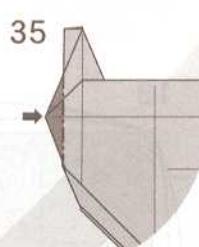


29



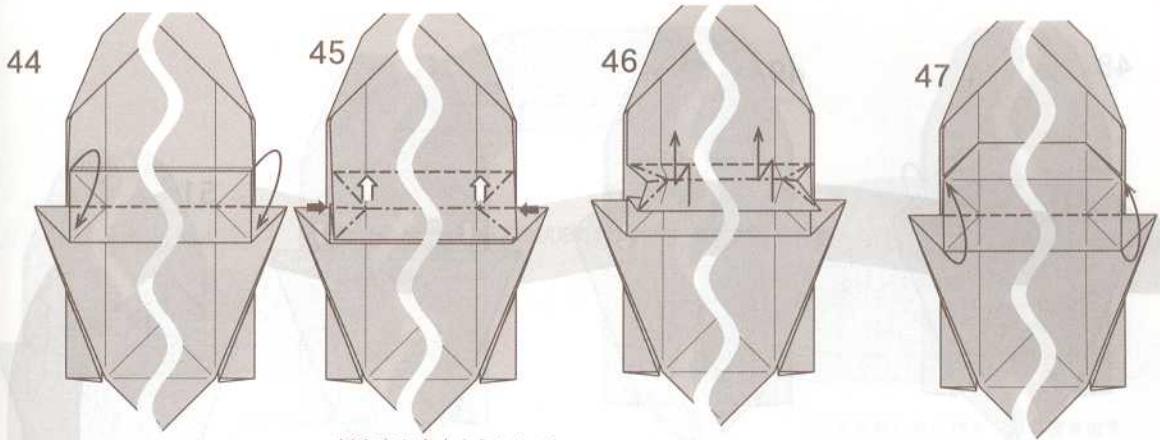
36

裏側に折り下げる



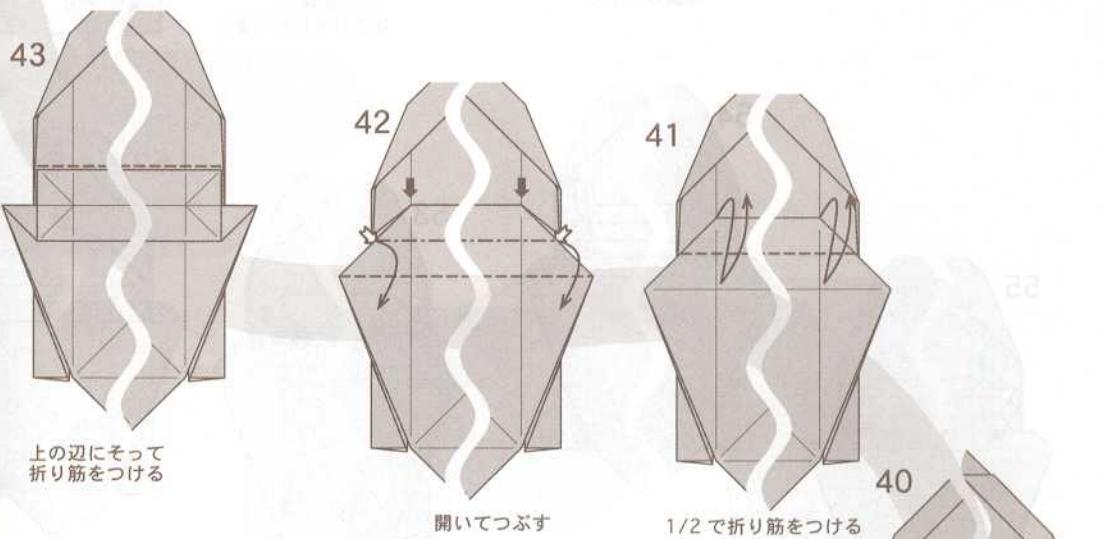
35

しづめ折り
opensink



紙を突き出すようにして
段折り状に折り畳む

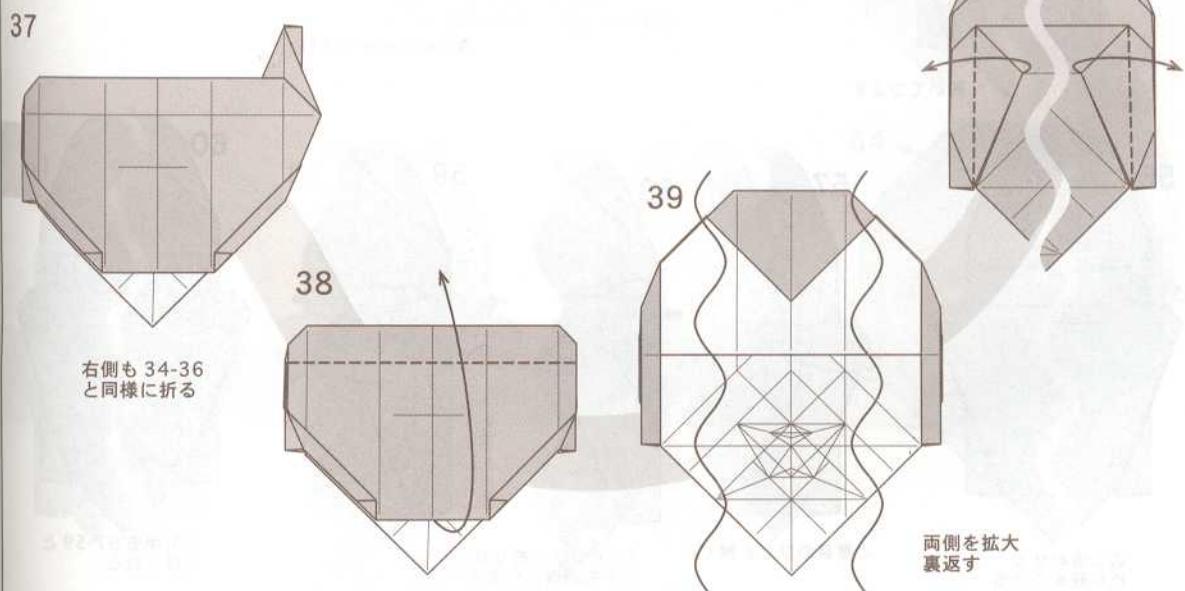
途中図



上の辺にそって
折り筋をつける

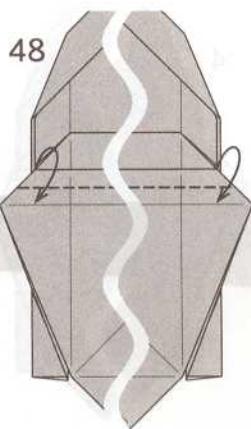
開いてつぶす

1/2で折り筋をつける

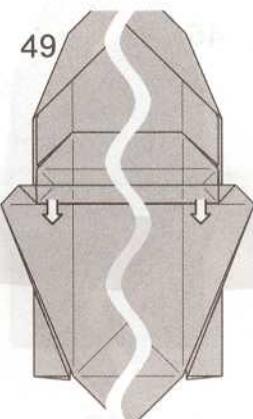


右側も 34-36
と同様に折る

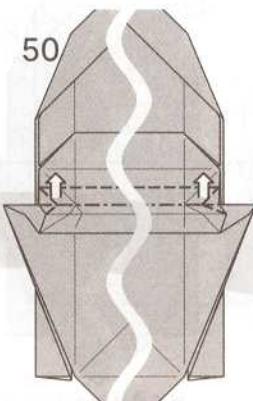
両側を拡大
裏返す



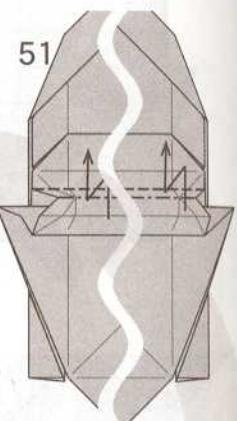
48



49



50

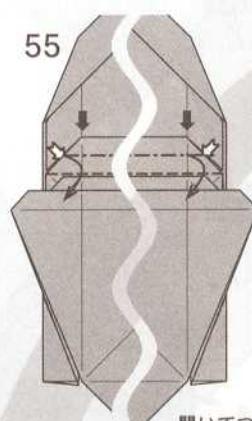


51

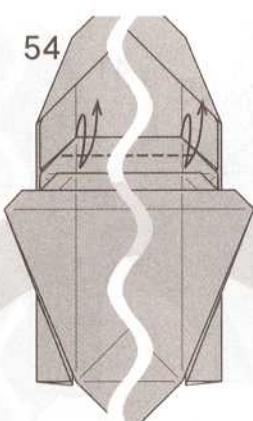
半開状にする

45と同様に
段折り状に折り重む

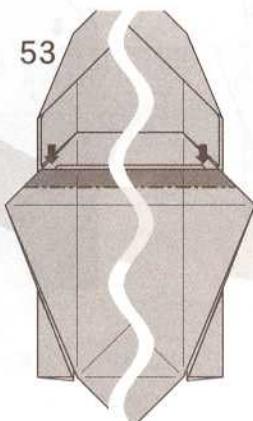
途中図



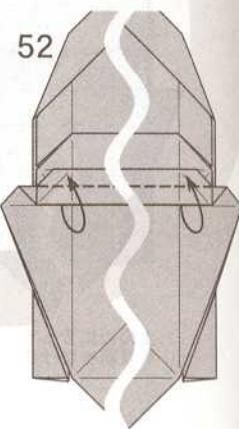
55



54



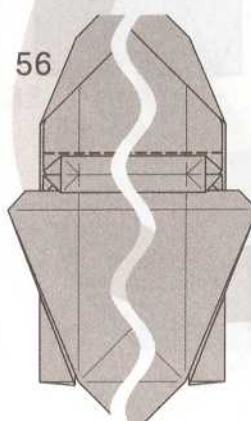
53



52

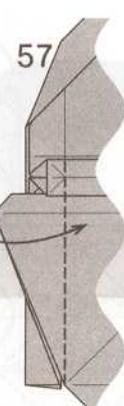
開いてつぶす

濃い部分を押し込む



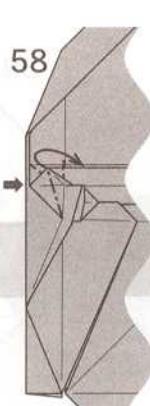
56

辺に合わせて
折り筋をつける



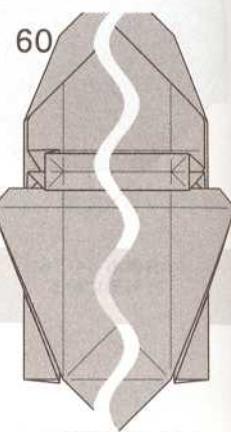
57

2番目のひだを開く



58

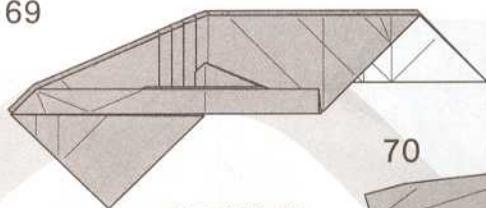
56で分けた折り筋と
カドを基準につぶす



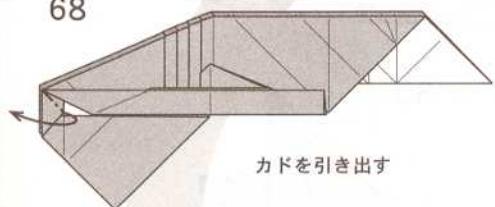
60

反対側も57-59と
同様に折る

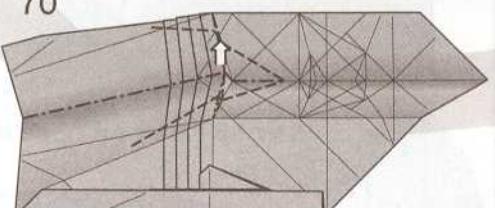
69



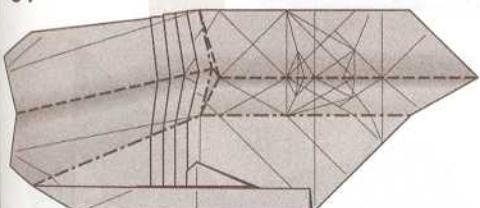
68



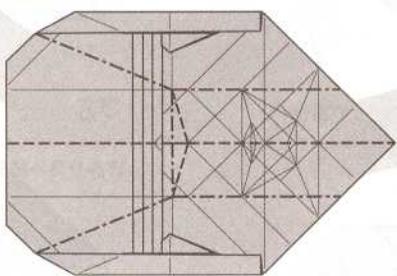
70



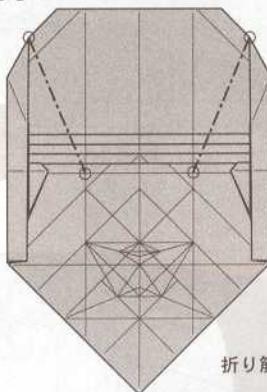
67



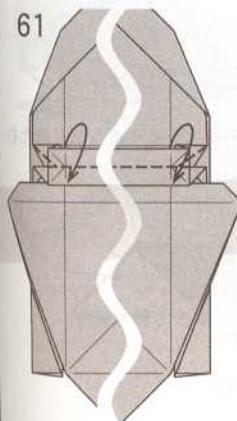
66



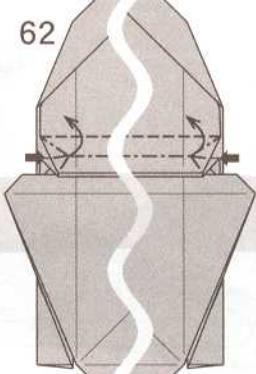
65



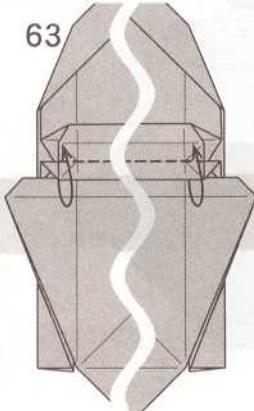
61



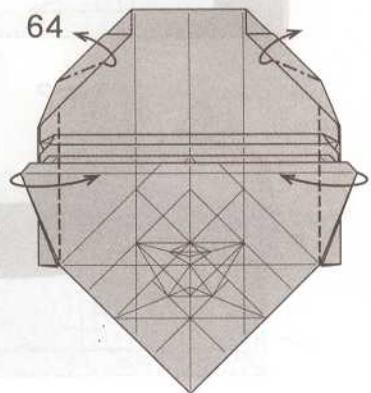
62



63

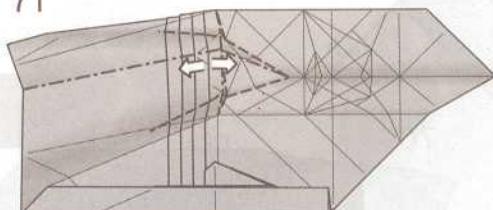


64



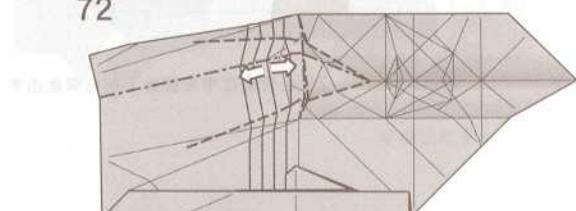
ついている折り目を使用し
45、50と同様に
段折り状に折り畳む

71



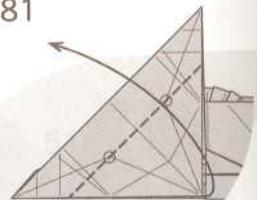
ひだを少し引き出す
左側の谷折り線をずらして上手く吸収する

72

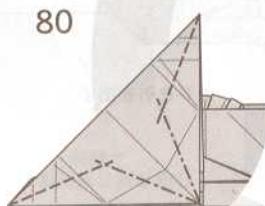


まだ

81

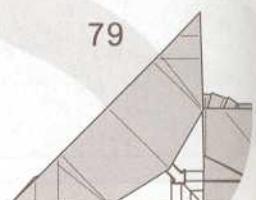


80



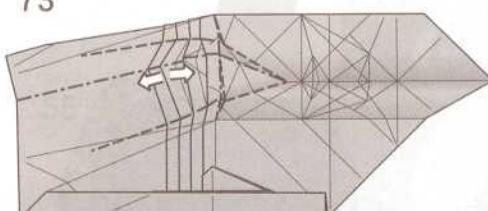
折り筋をつける

79



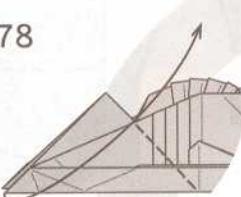
折り畳まれているカドを引き出す

73

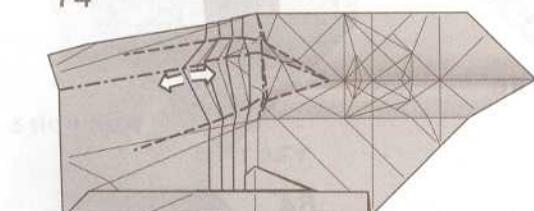


まだ

78

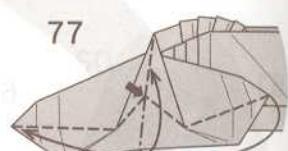


74



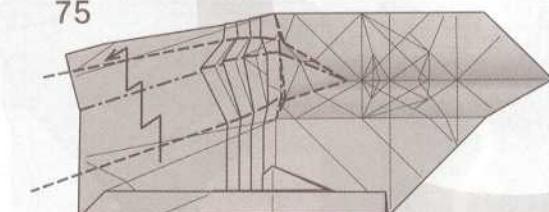
もう一つ

77



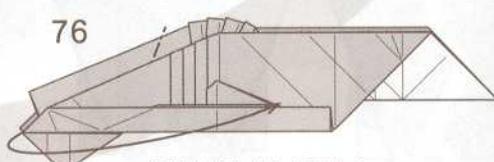
中割り折りするよう折りたたむ

75

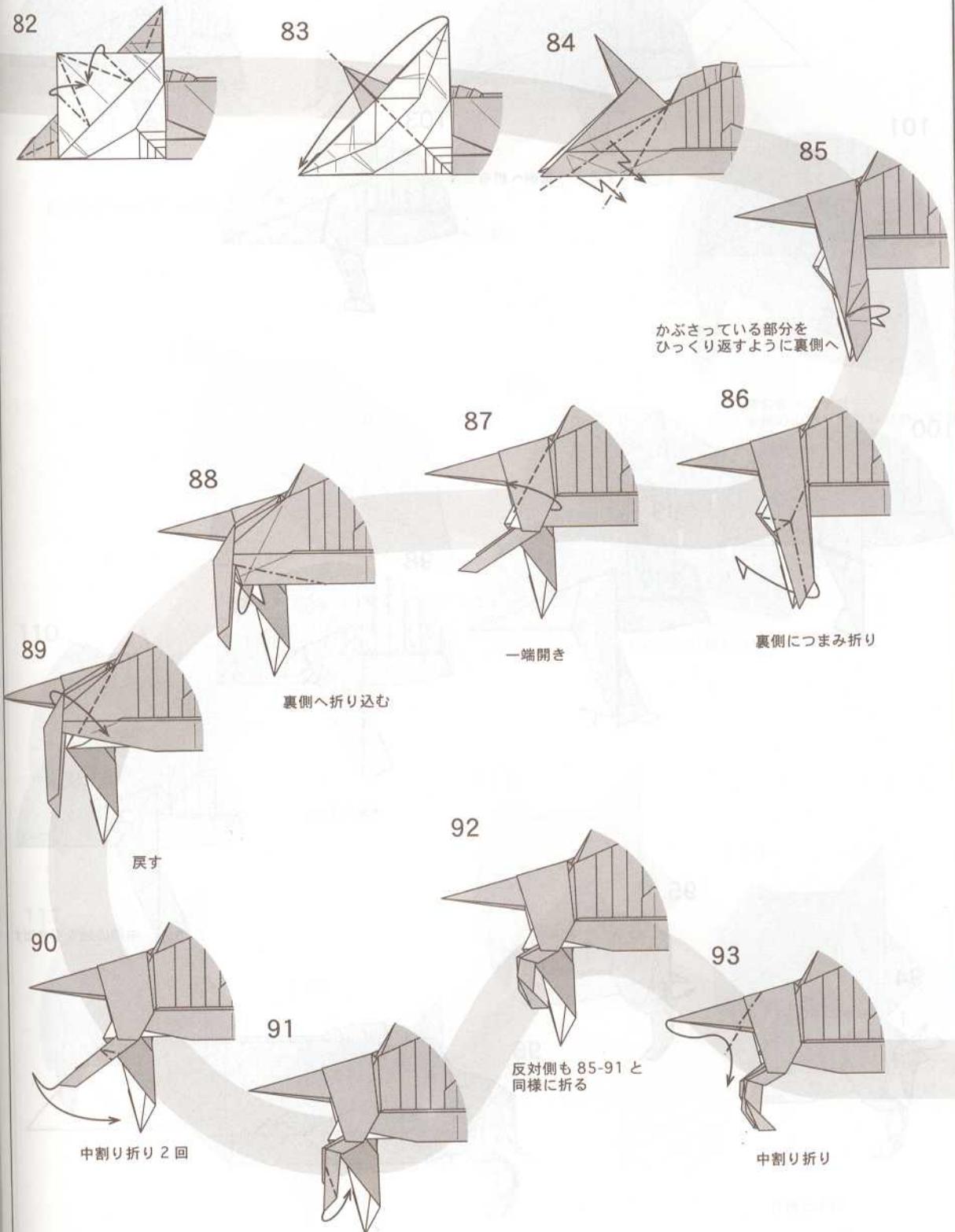


全体を折り畳む
中央と左右の山が
だいたい平行になるよう調整する

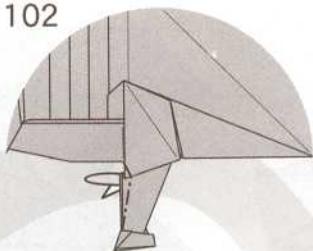
76



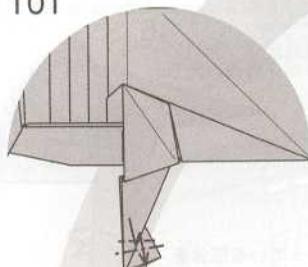
中割り折りするよう開く



102

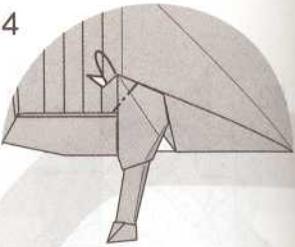


101

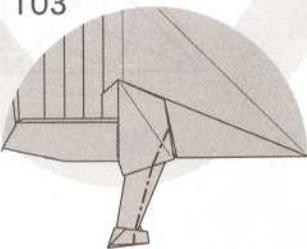


細くするよう裏側へ折る

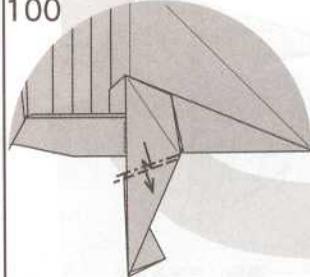
104



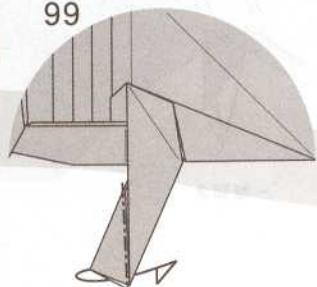
103



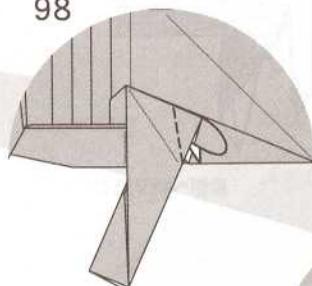
100



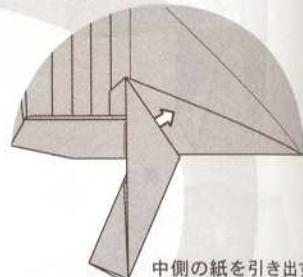
99



98

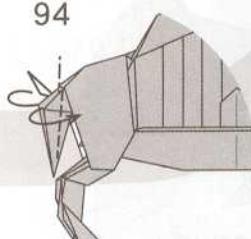


97



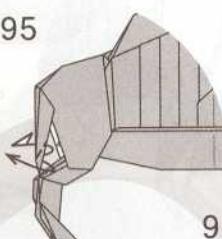
中割り折り

94

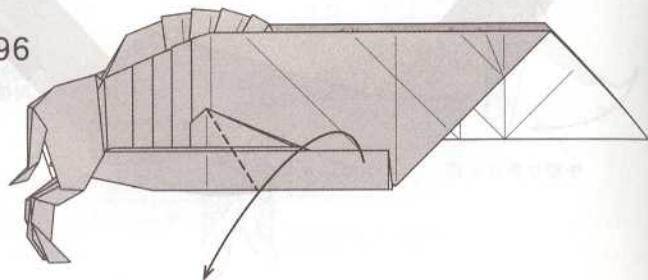


かぶせ折り

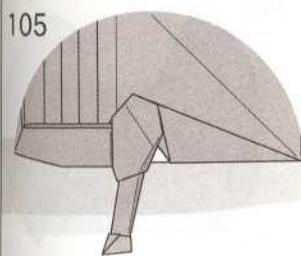
95



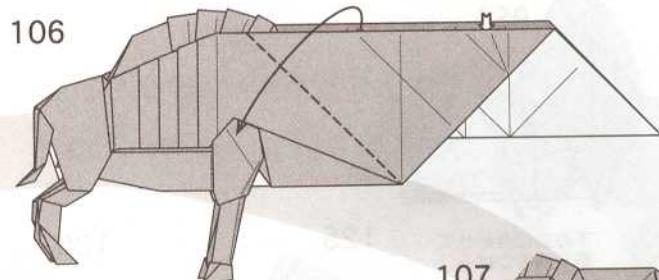
96



中側の紙を引き出す

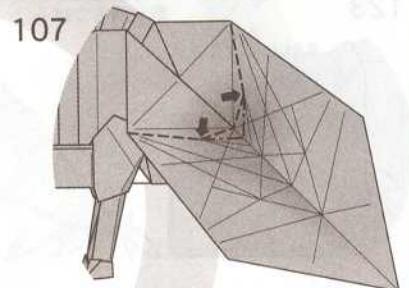


105



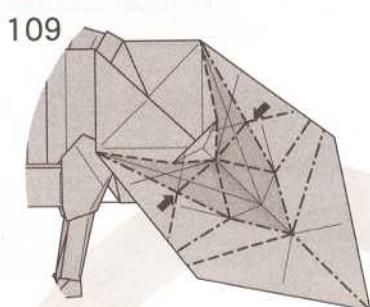
106

反対側も 96-104 と同様に折る



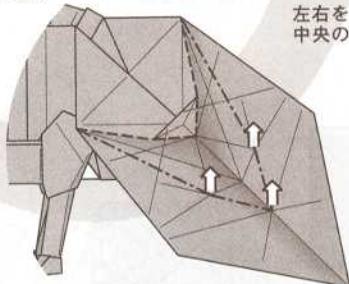
107

大きく開く

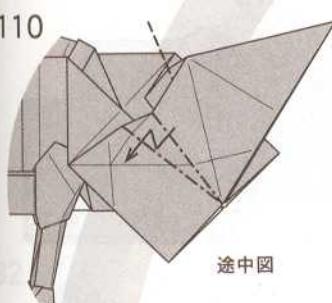


109

108

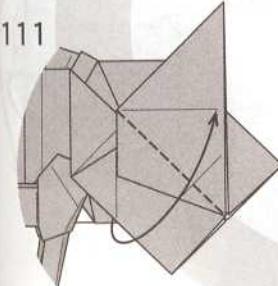
左右をへこませ
中央の山折り線をしっかり折る

そのままついている線で折りたたむ

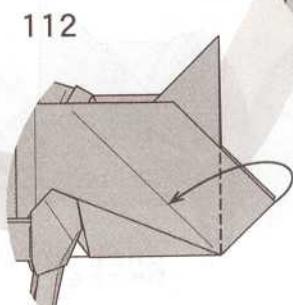


110

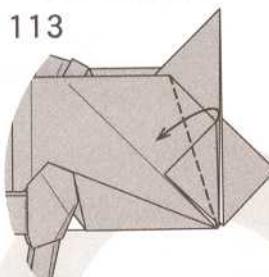
途中図



111

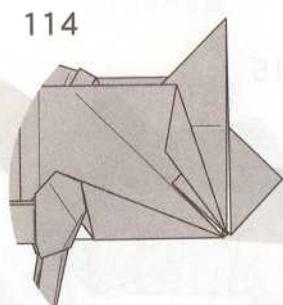


112



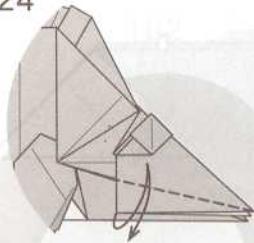
113

114

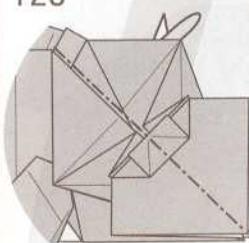


開く

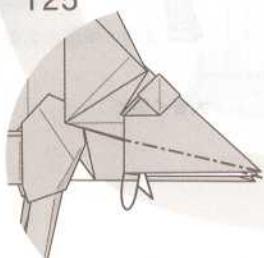
124



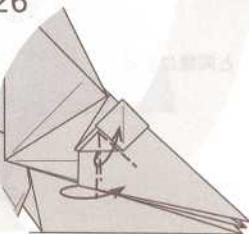
123



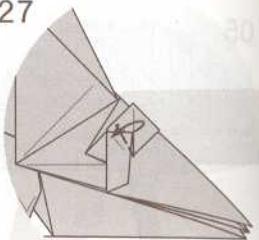
125



126

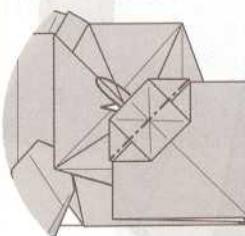


127

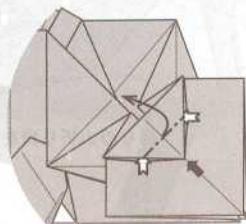


中割り折り

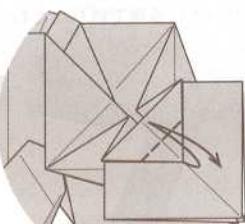
122



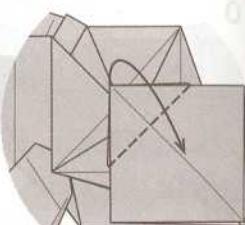
121



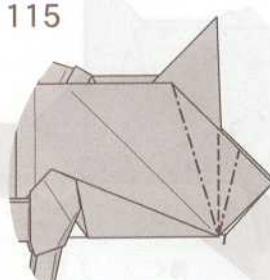
120



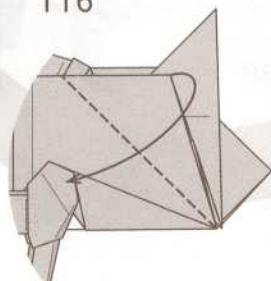
119



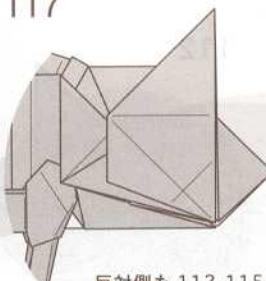
115



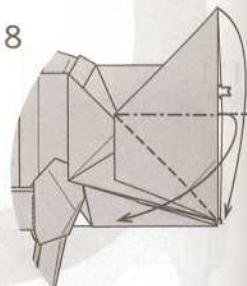
116



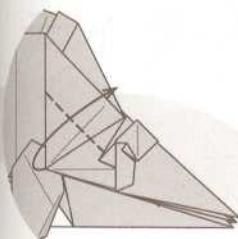
117



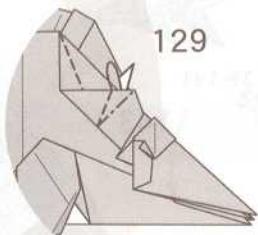
118

反対側も112-115と
同様に折る

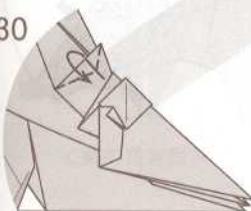
128



129

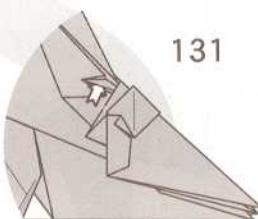


130

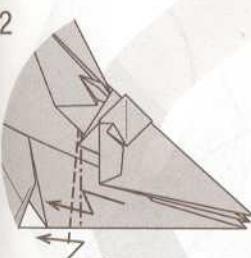


耳をつまむように折る

131

耳を開く
反対側も 128-131 と同様に折る

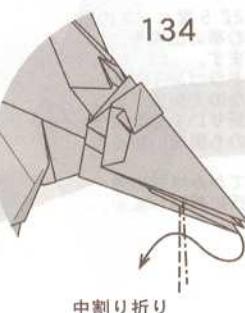
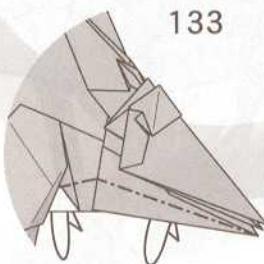
132



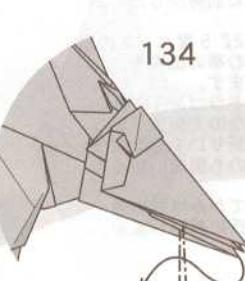
両側段折り

中側へ折り込む

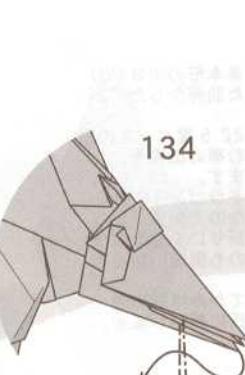
133



中割り折り



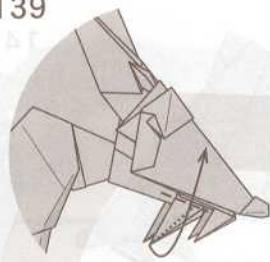
中割り折り



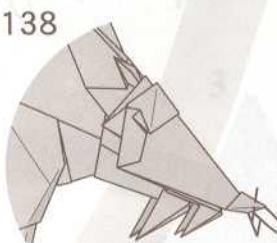
かぶせ折り 2 回

135

139

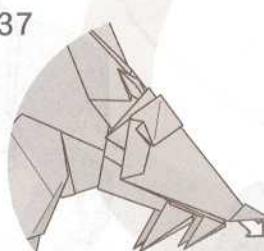
カドを折り上げる
先を折り込む

138



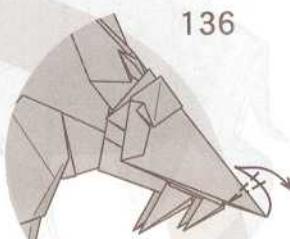
先を折り込む

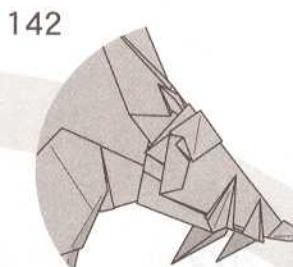
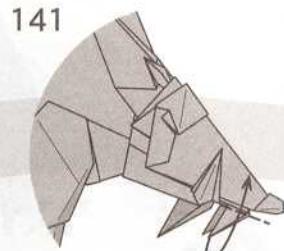
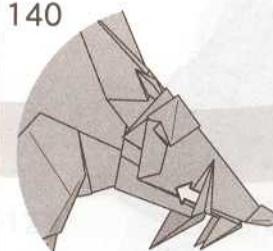
137



中側の紙を引き出す

136

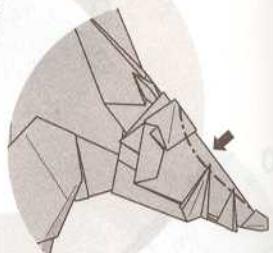




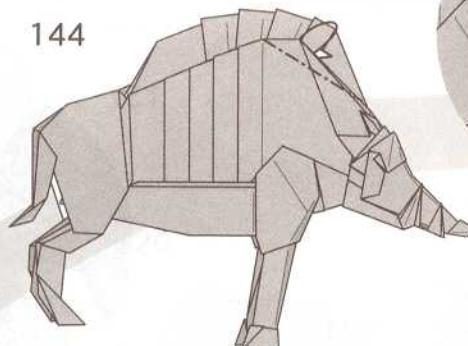
中側の紙を引き出す

反対側も 139-141
と同様に折る

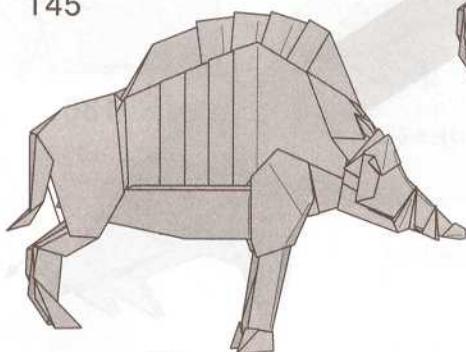
143



144



145



完成

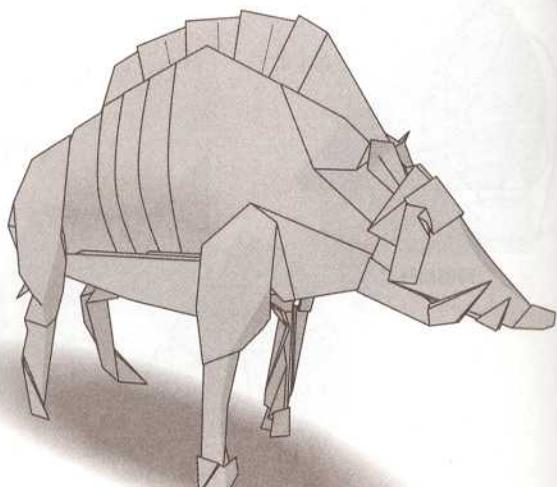
この作品の目玉的な技法として、鶴の基本形の小さい力
ドの部分から折り出したひだで表現した肋骨からたてが
みがあります。

作者もあまり使用はしていませんが、22.5度ベースの設
計の中にひだを比較的無理なく組み込む事の出来る、

けっこう強力な表現技法であると思います。

ちなみに使用例としてはエンシェントドラゴン TV チャ
ンピオンバージョンがあります。腹部なのであまり目立
たない上に折るのに手間がかかる上に折りにくくなりま
すが、興味のある方は組み込んでみるのも面白いかと思
います。

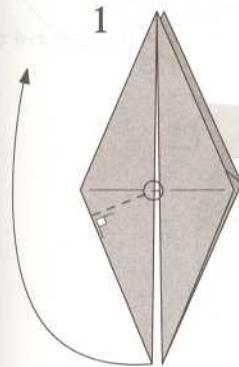
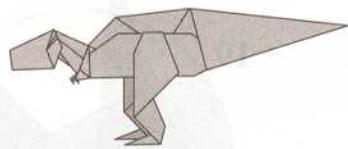
なお肋骨部は北條高史氏のトラを、たてがみは故吉野一
生氏の技法をヒントになりました。両氏に感謝します。



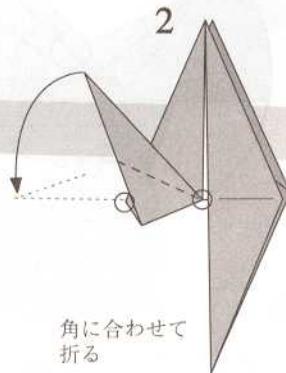
ティラノサウルス

TYRANNOSAURUS

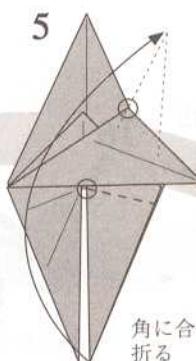
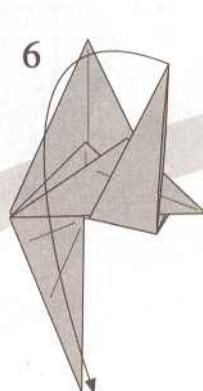
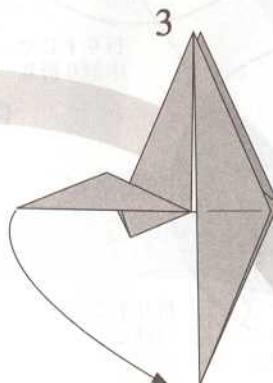
創作・作図：木村哲夫
(2003.02)



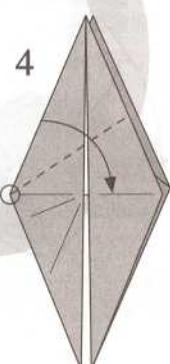
<鶴の基本型>



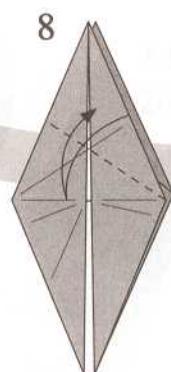
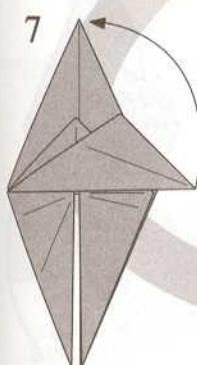
角に合わせて
折る



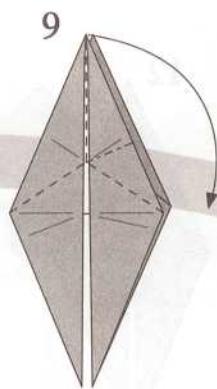
角に合わせて
折る



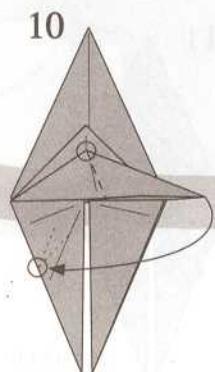
折りすじに合わせて
折る



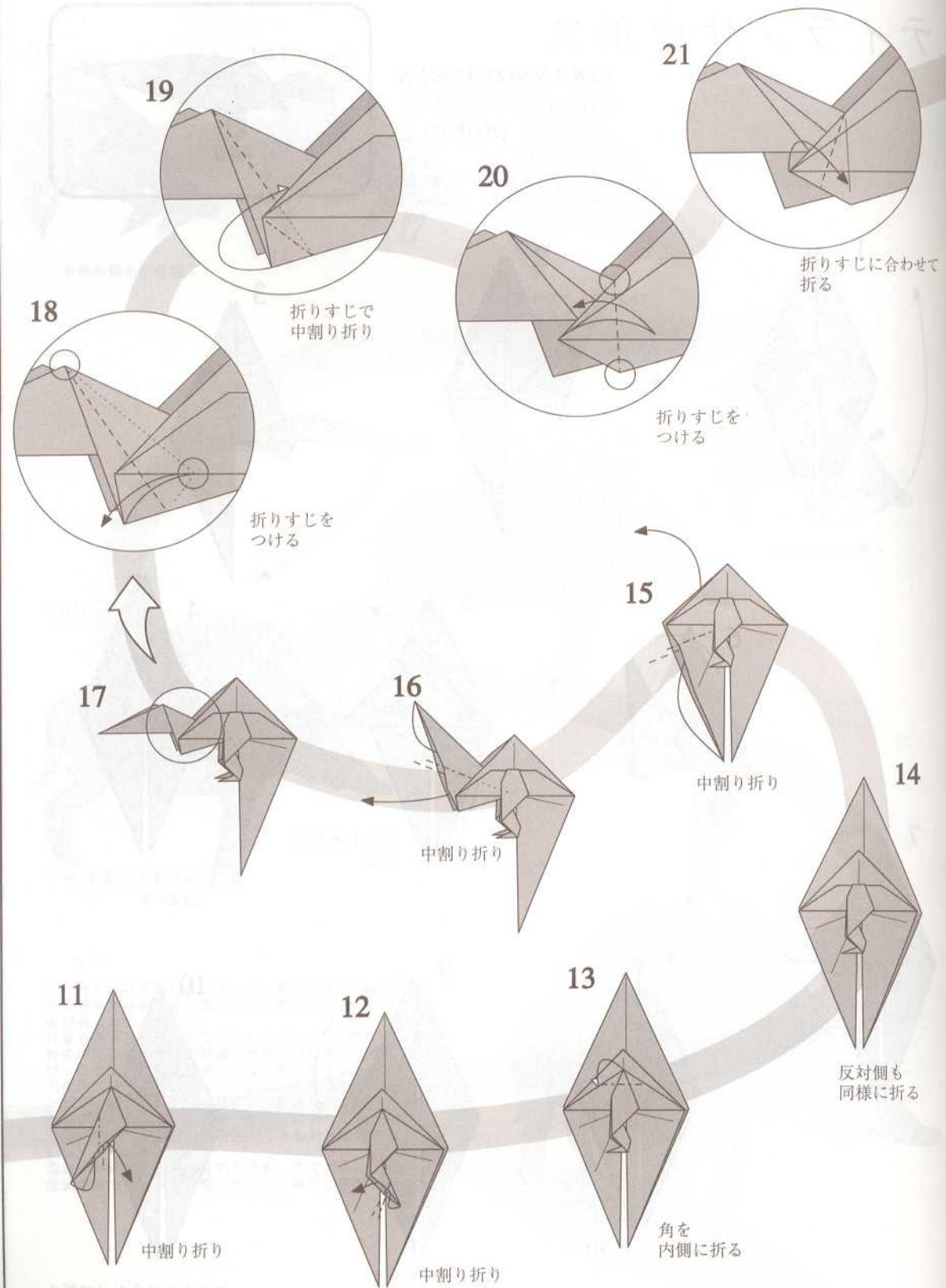
折りすじをつける



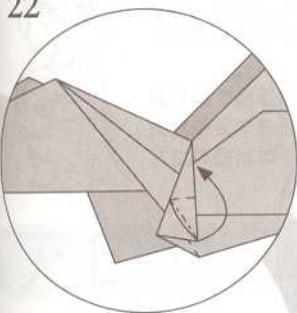
つまみ折り



紙のふちに合わせて折る

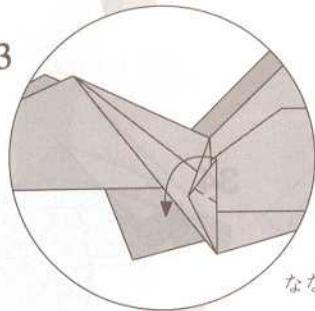


22



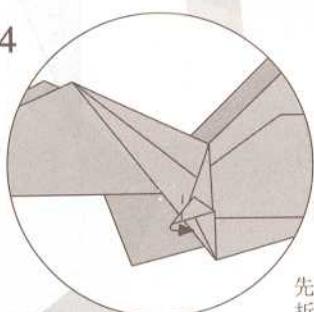
引き寄せるように
折る

23



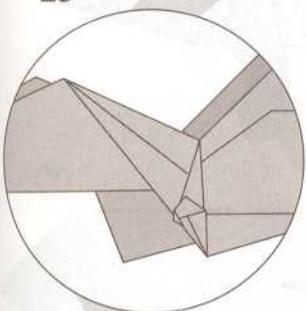
ななめに折る

24



先端を
折り返す

25



26



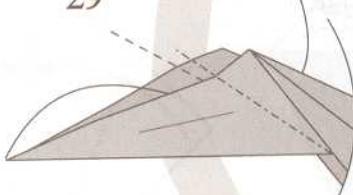
反対側も
同様に折る

30



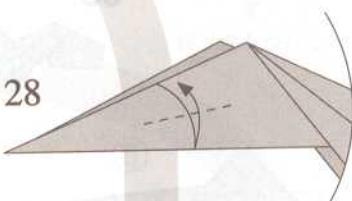
このように
折る

29



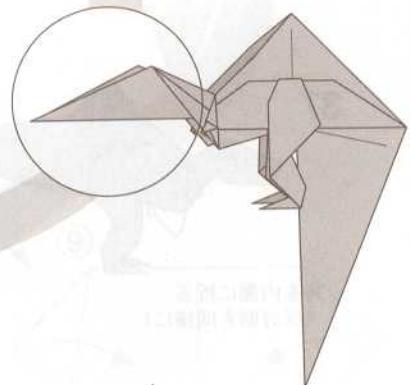
つけたしを
角に合わせるように
中割り折り
(次図参照)

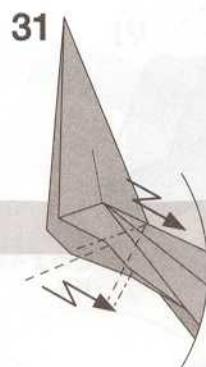
28



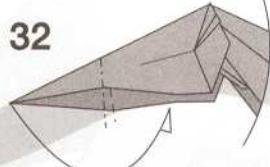
紙のふちを合わせて
しをつける

27

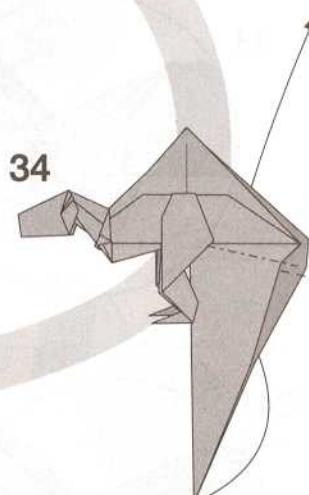
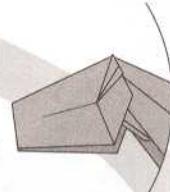




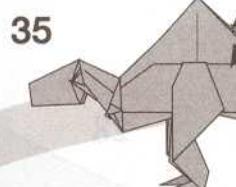
ななめに段折り



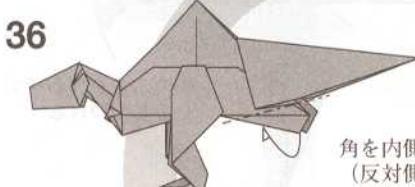
先端を中割り折り



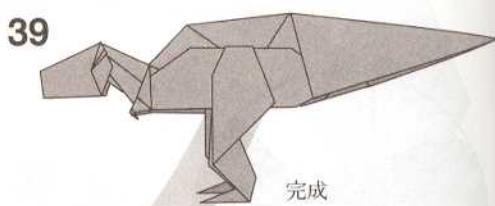
折りすじで
中割り折り



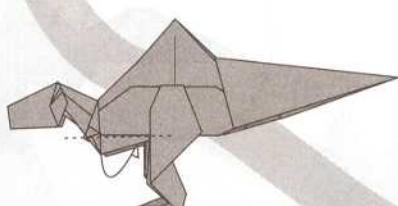
ななめに段折り



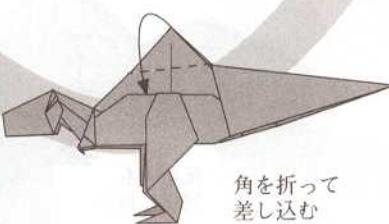
角を内側に折る
(反対側も同様に)



完成



角を内側に折る
(反対側も同様に)

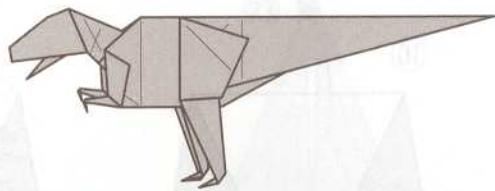


角を折って
差し込む



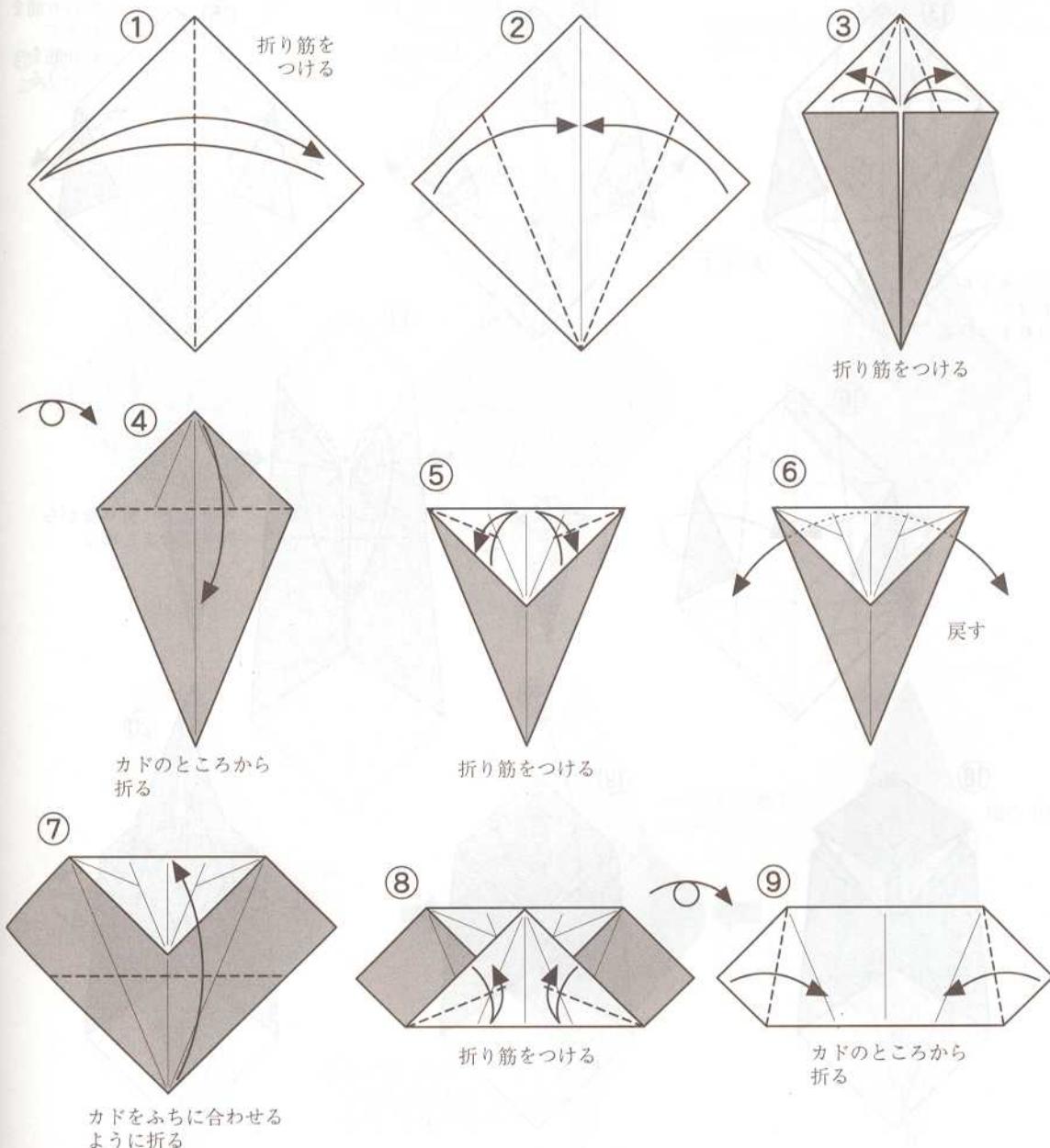
昨年、発表したセイスモサウルスの基本型のバランスを変えてアロサウルスを作つてみました。

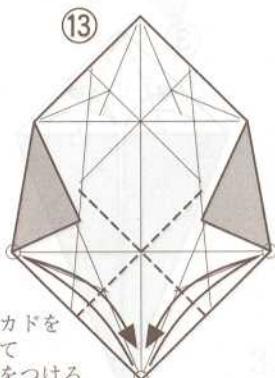
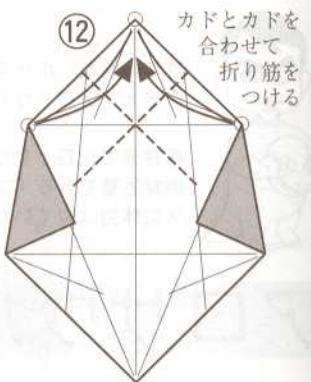
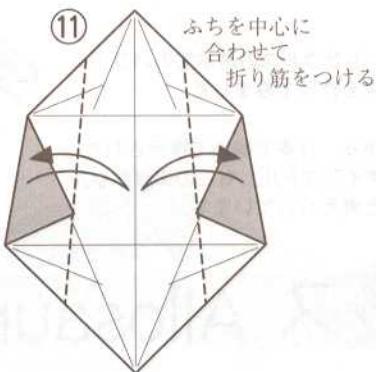
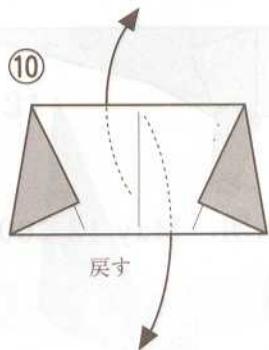
福井県で化石が見つかり、日本で初めて復元された肉食恐竜である「フクイラプトル」もこのアロサウルスに体型は似ていたと考えられています。



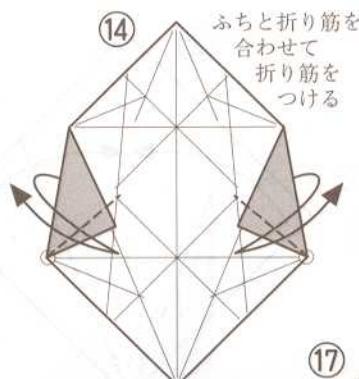
高井 弘明 May 18 2003

アロサウルス Allosaurus

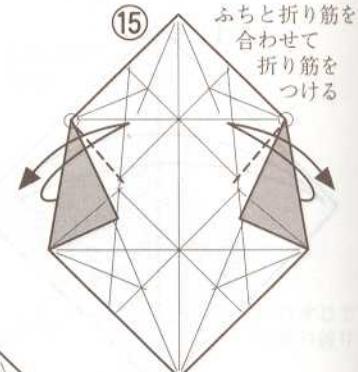




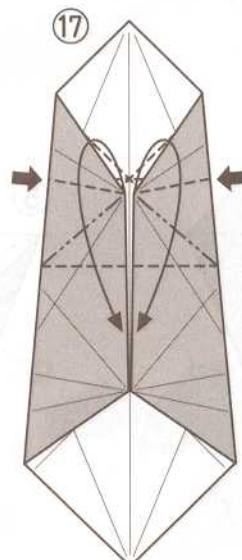
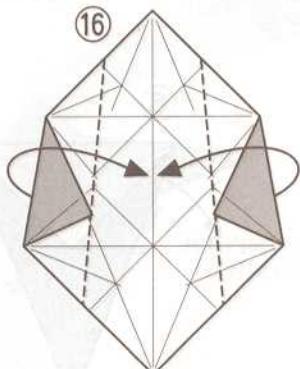
カドとカドを
合わせて
折り筋をつける



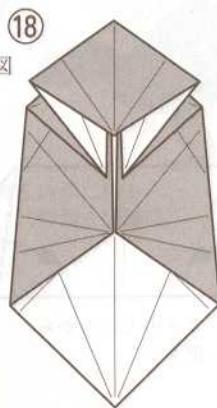
ふちと折り筋を
合わせて
折り筋をつける



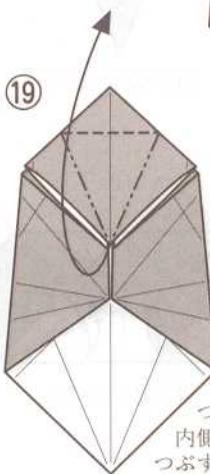
ふちと折り筋を
合わせて
折り筋をつける



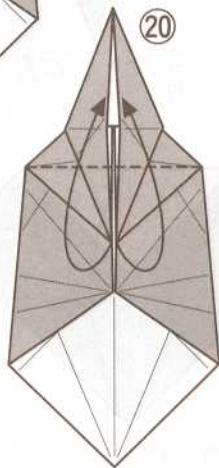
カドを下に折りながら
折り筋でまとめる

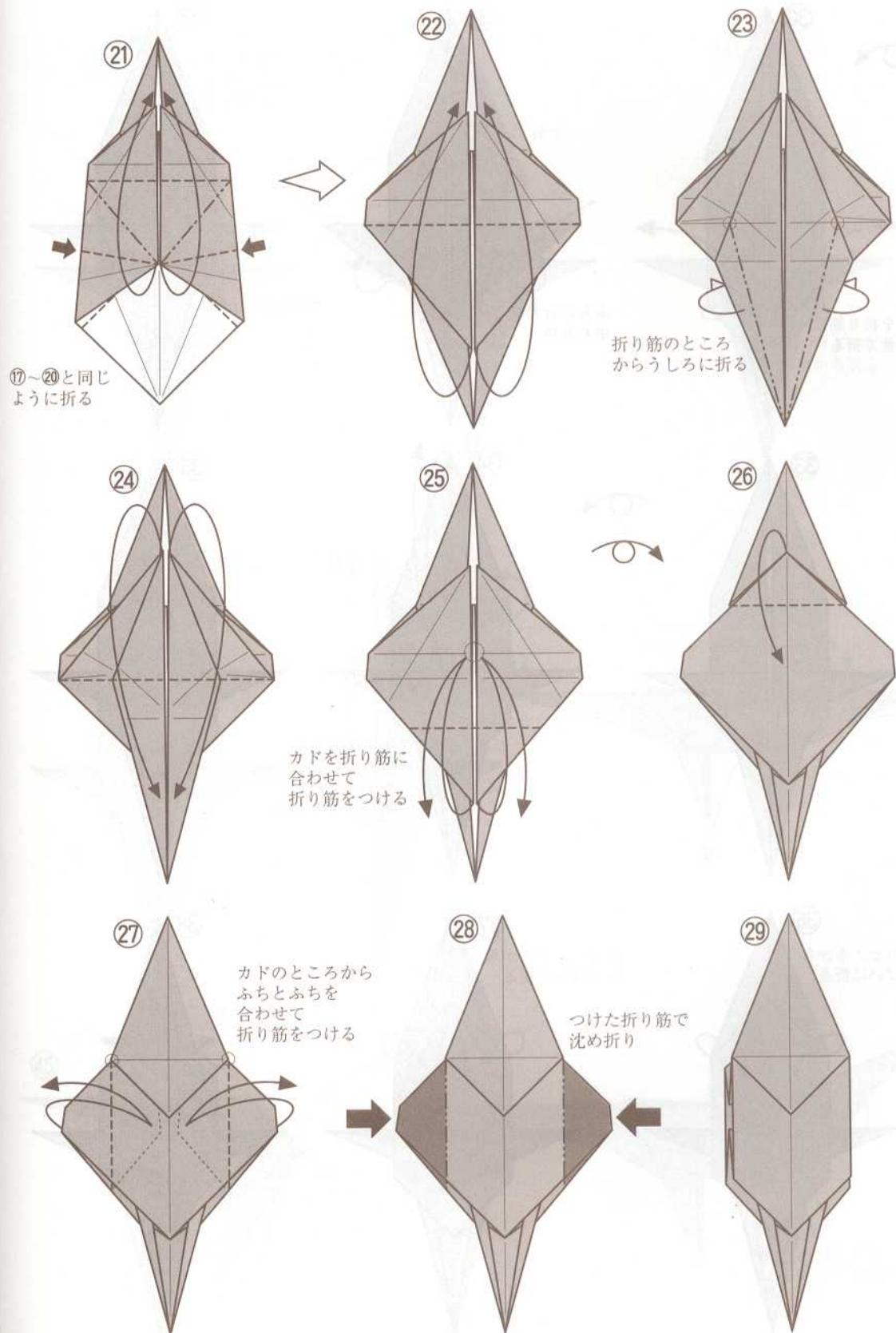


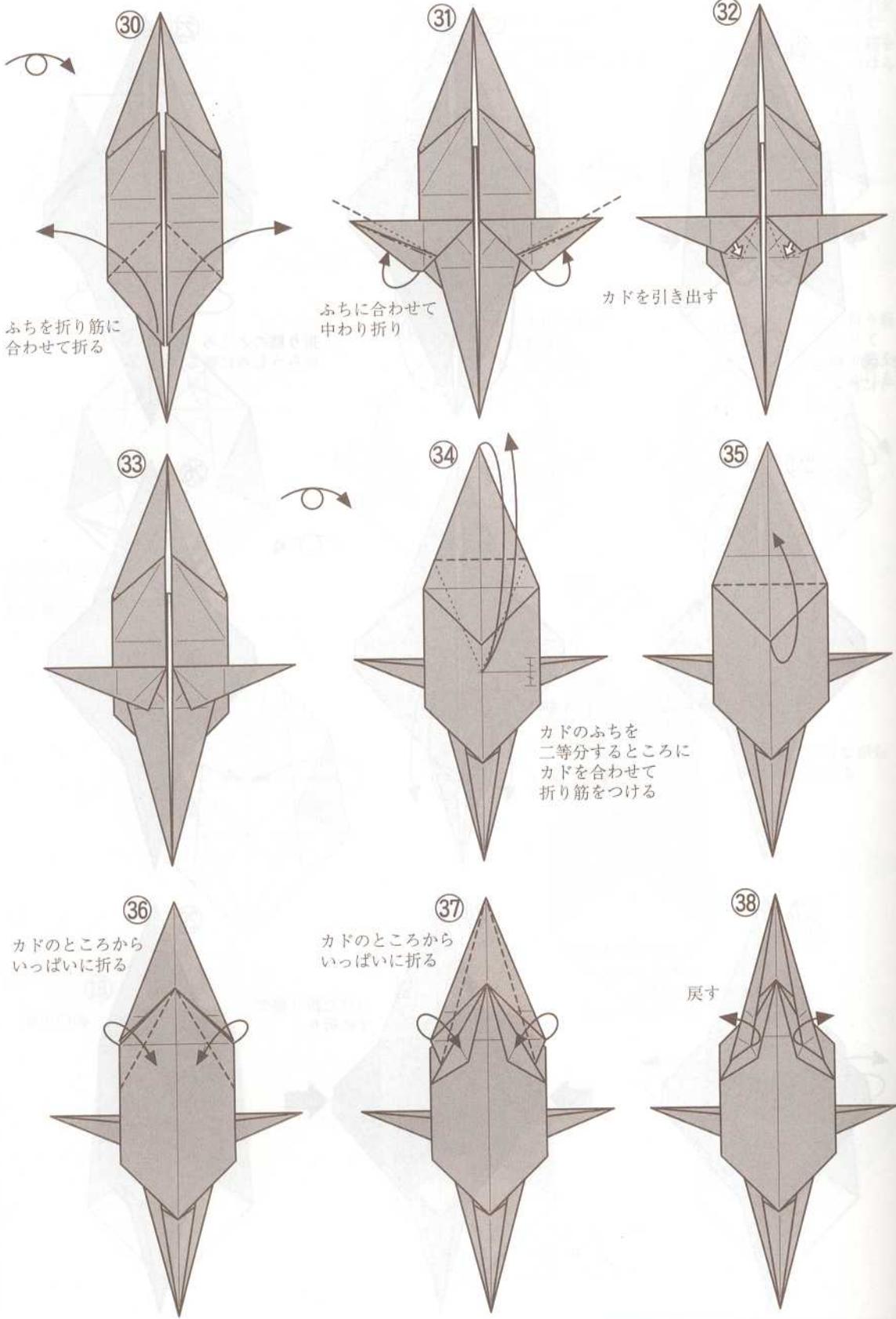
途中の図

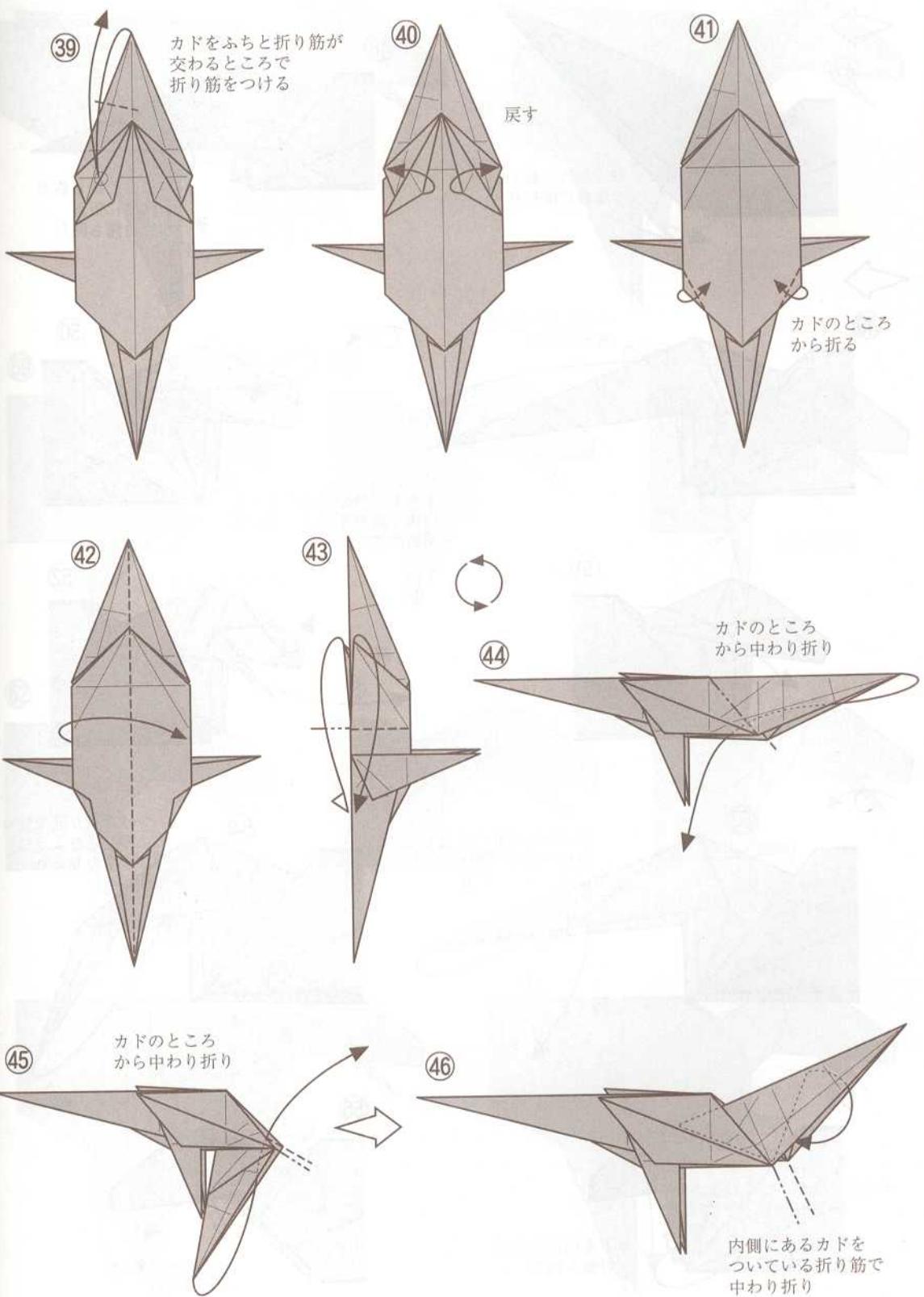


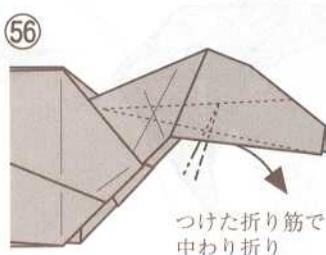
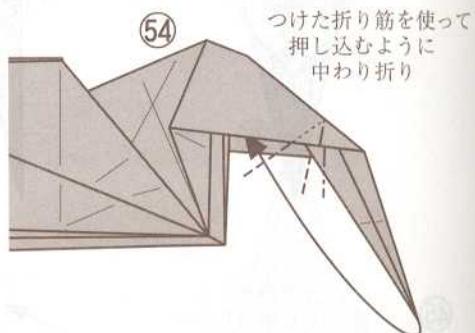
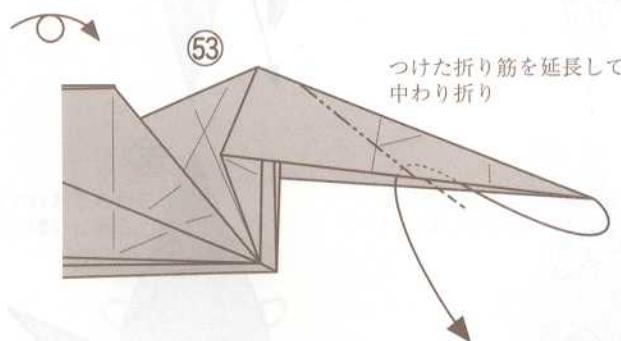
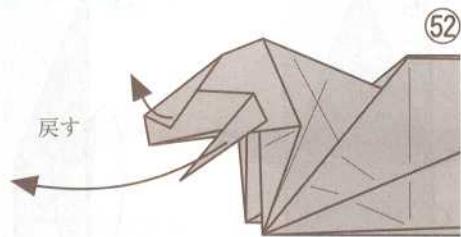
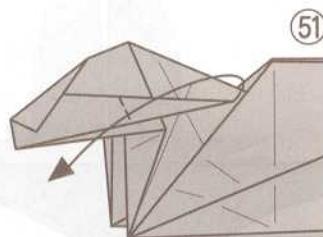
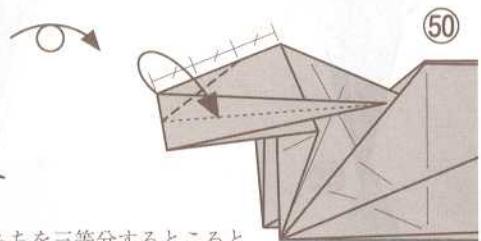
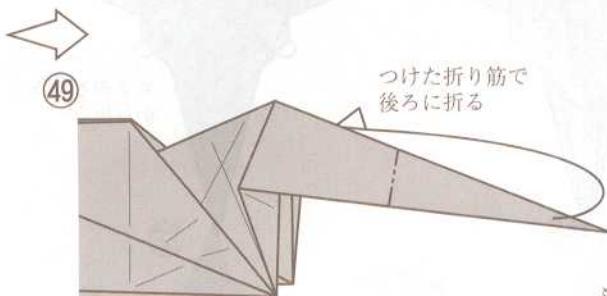
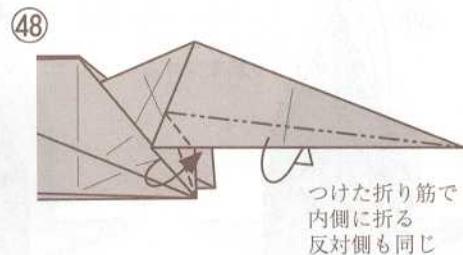
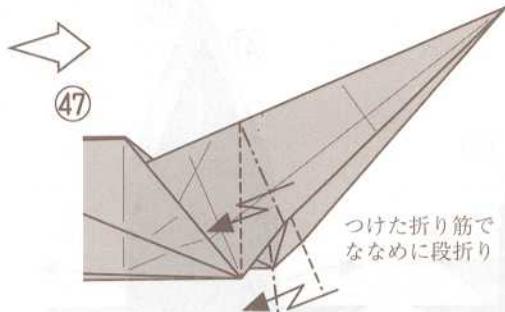
つけた折り筋で
内側をひろげて
つぶすように折る

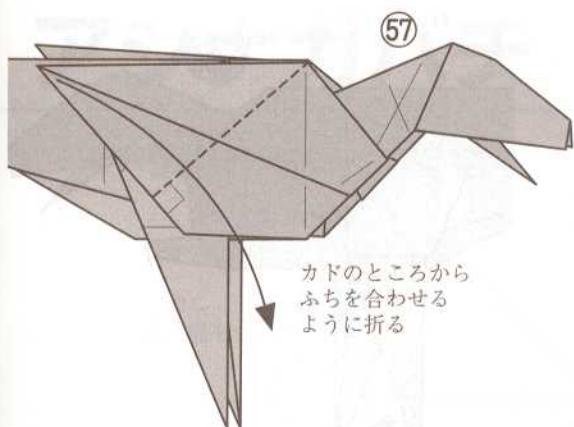




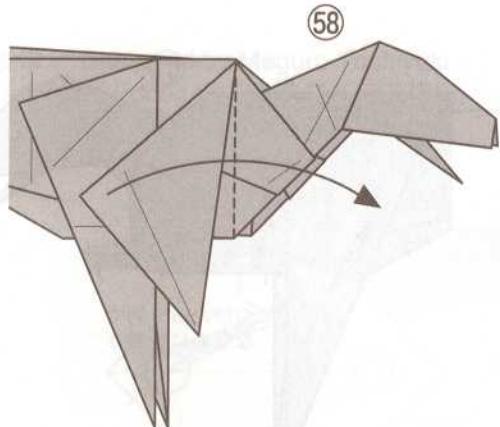




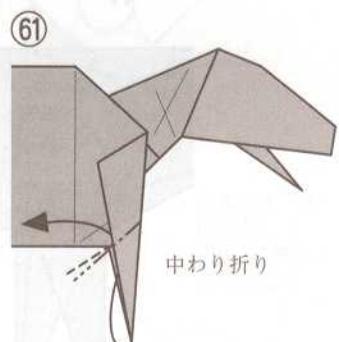
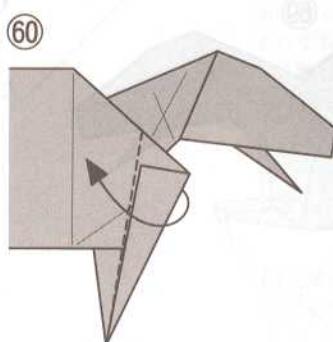




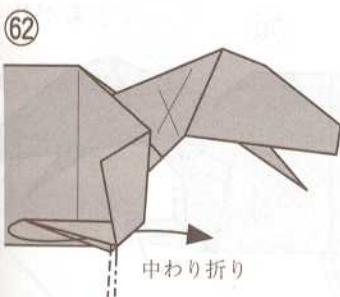
カドのところから
ふちを合わせる
ように折る



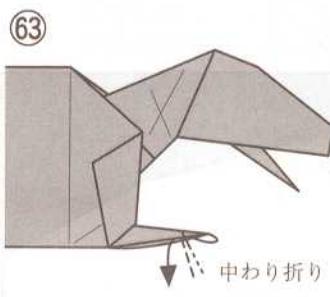
カドを三等分する
角度で折る



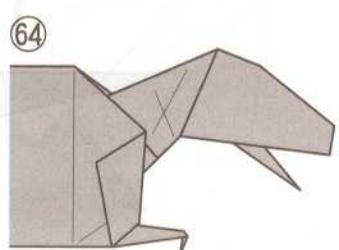
中わり折り



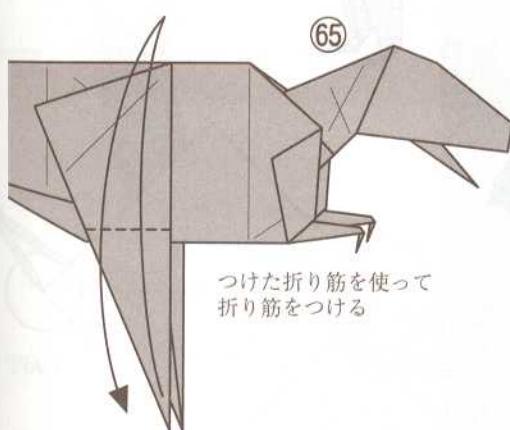
中わり折り



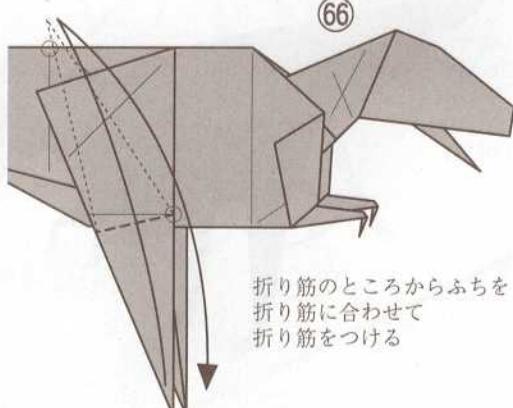
中わり折り



反対側も同じ
ように折る

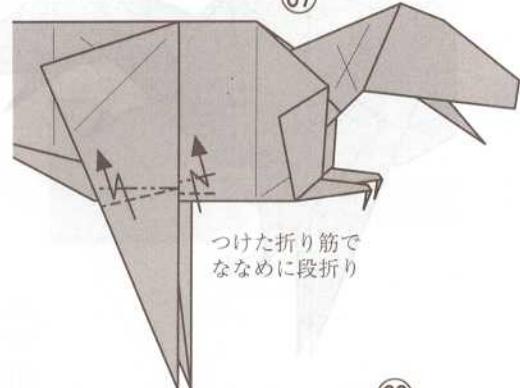


つけた折り筋を使って
折り筋をつける



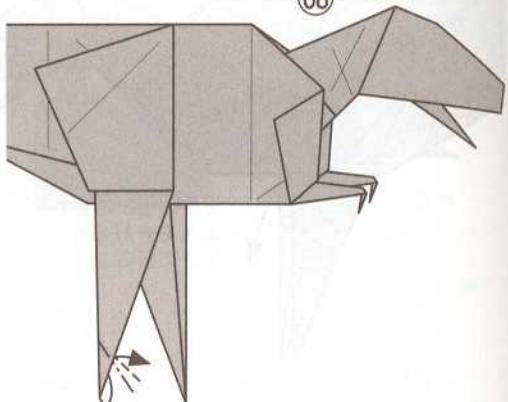
折り筋のところからふちを
折り筋に合わせて
折り筋をつくる

⑥7



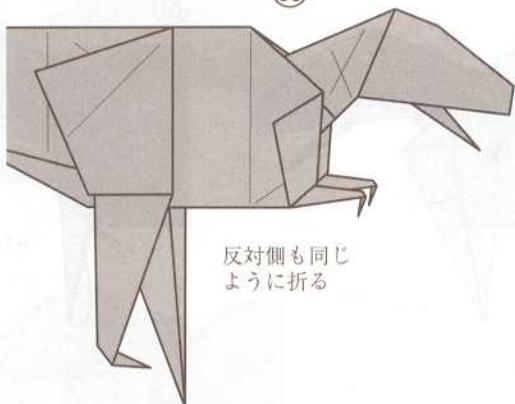
つけた折り筋で
ななめに段折り

⑥8



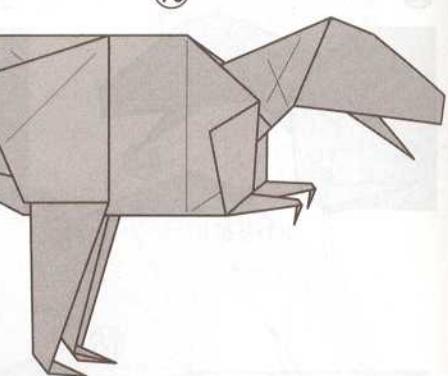
中わり折り

⑥9

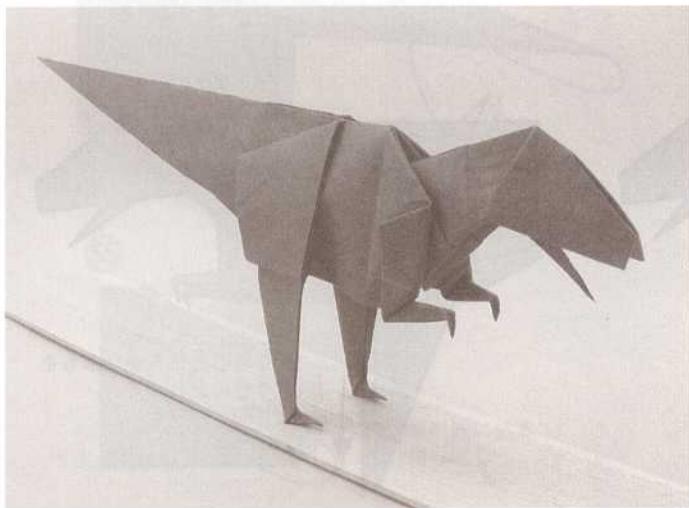


反対側も同じ
ように折る

⑦0



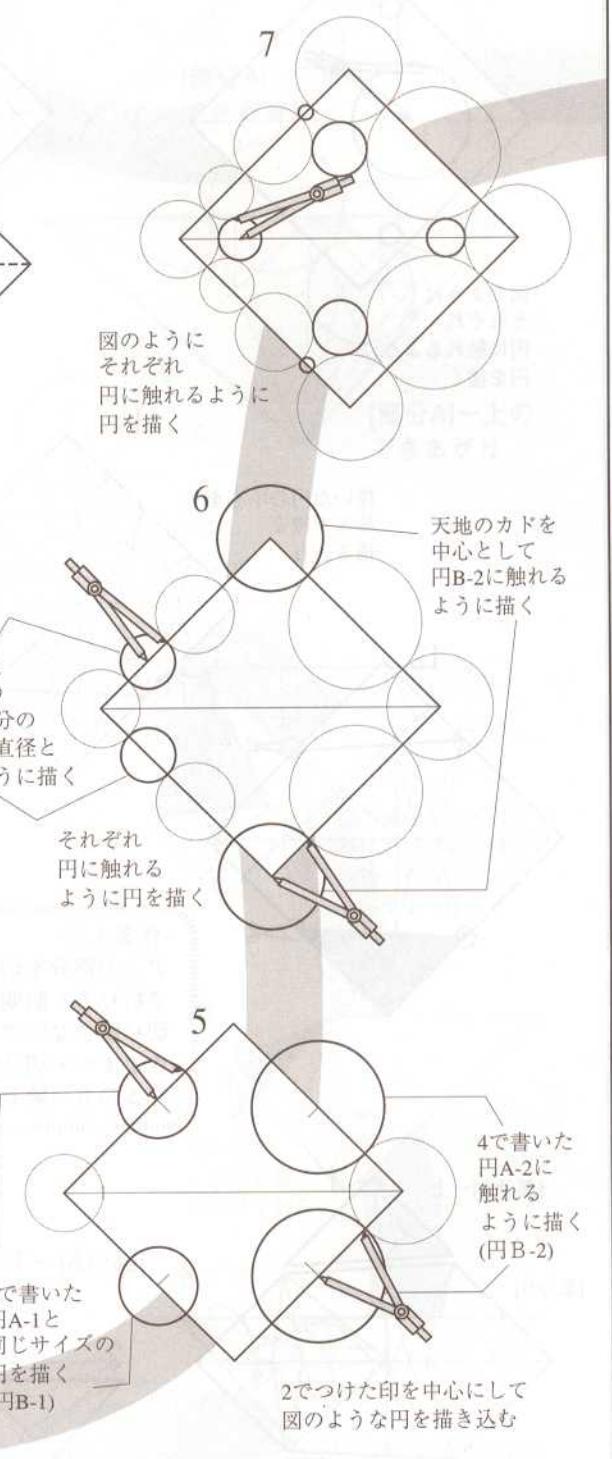
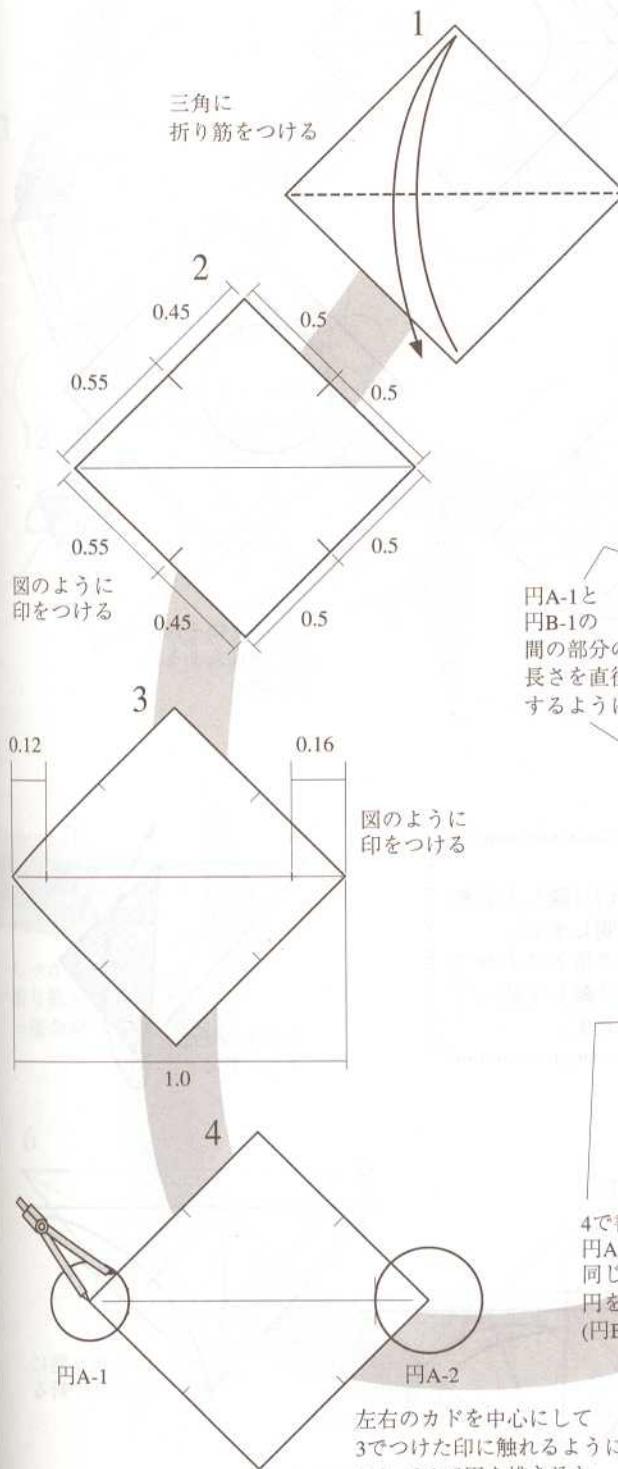
できあがり



アシナガバチ

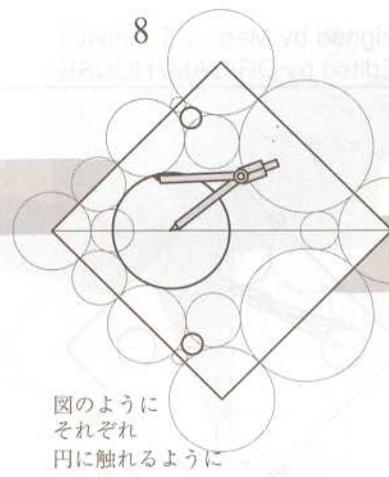
目黒俊幸 / Designed by Meguro Toshiyuki
Diagrams and Edited by ORIGAMI HOUSE

Long-legged wasp

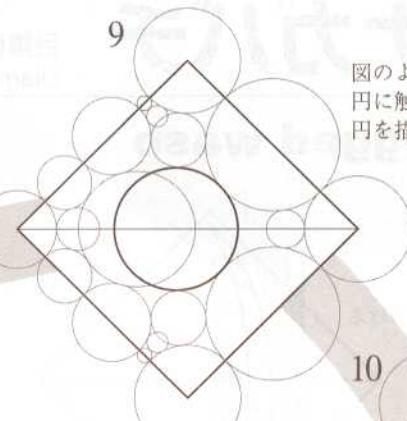


左右のカドを中心にして3でつけた印に触れるようにコンパスで円を書き込む

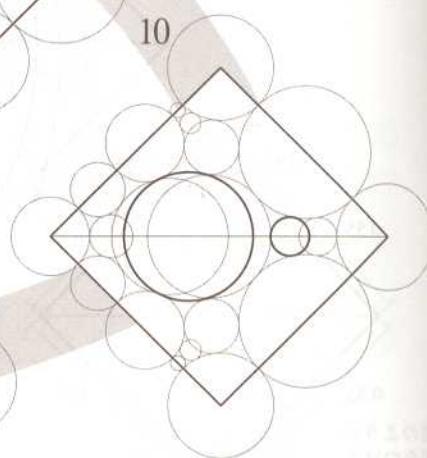
8



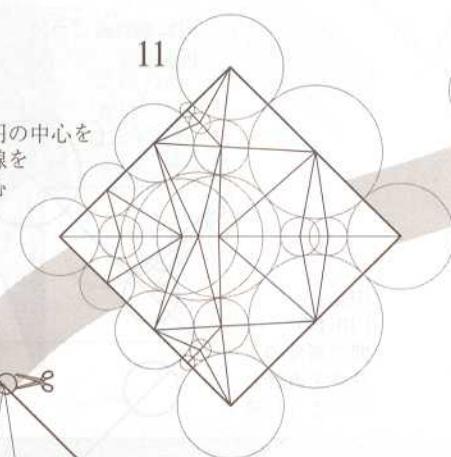
9



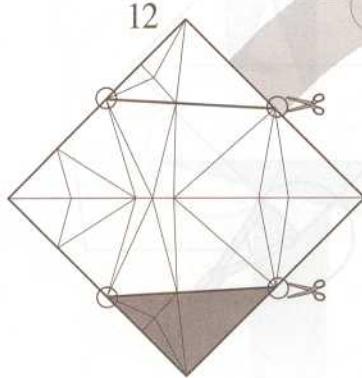
10



11



12

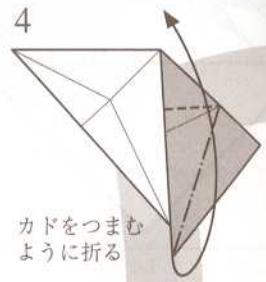


図のようにそれぞれ
円に触れるように
円を描く

-作者より-

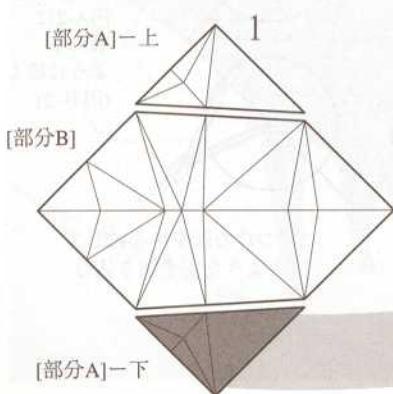
アミの部分を切り離した状態
で折り方を説明します。
切り離さないで折ることができますが、
切り離して折ってみるのも一興です。

4



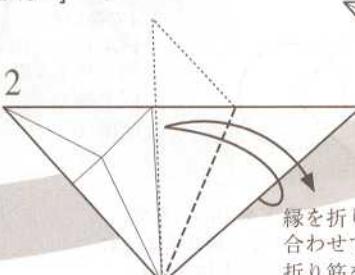
[部分A]-上

1

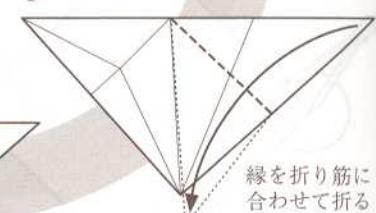


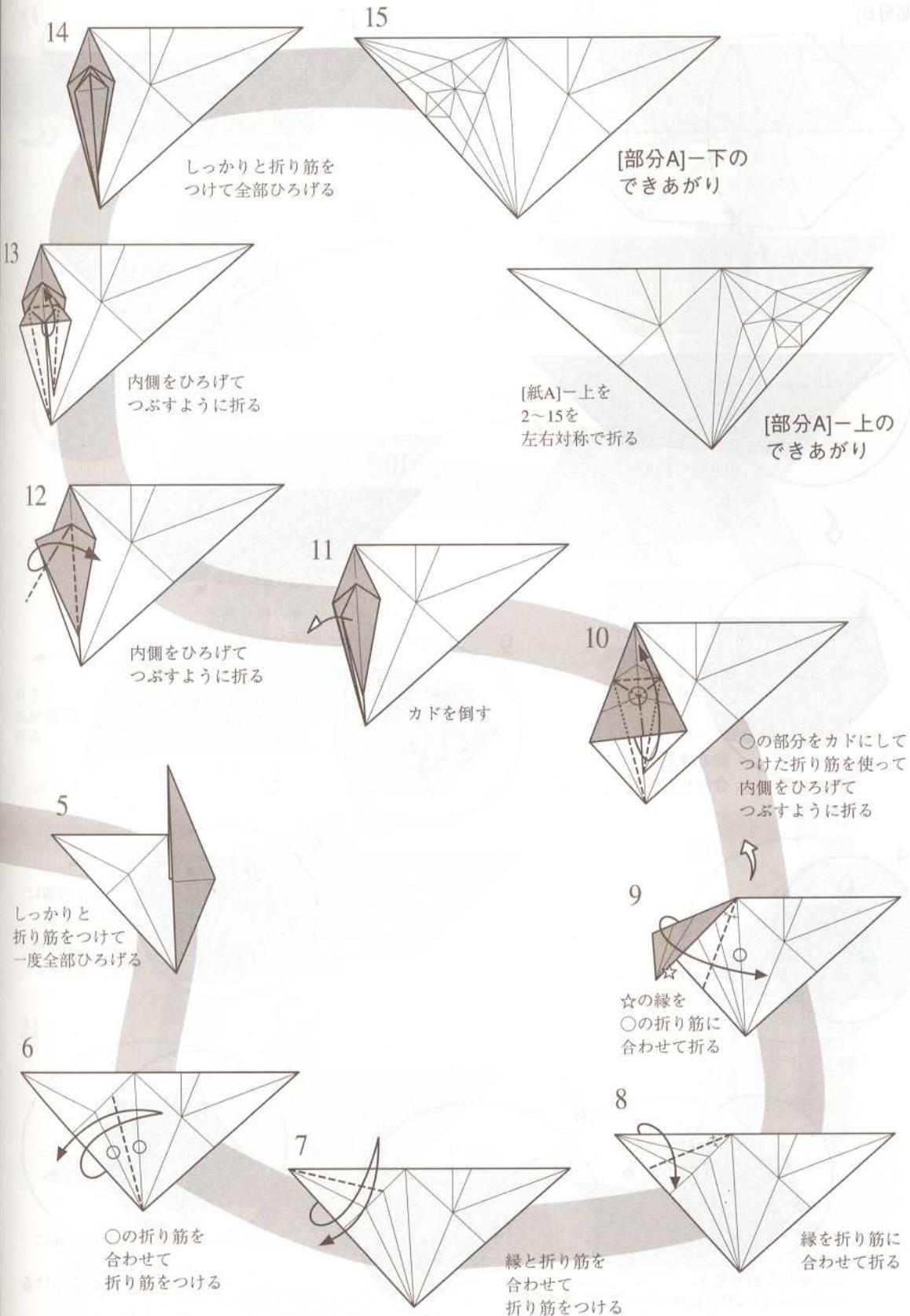
[部分A]-下

2

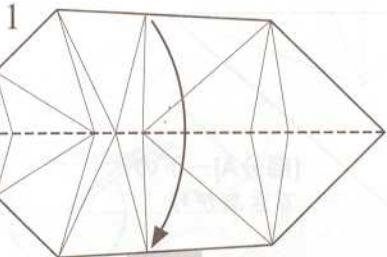


3

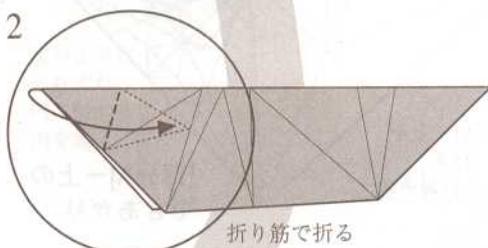




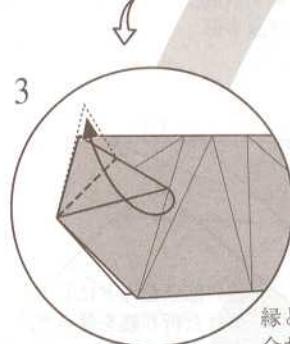
[部分B]



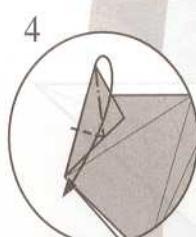
半分に折る



折り筋で折る



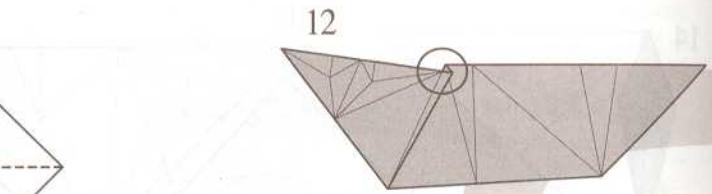
縁と縁を
合わせて折る



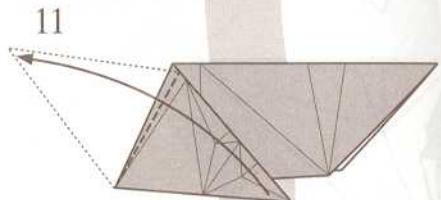
カドをつまむ
ように折る



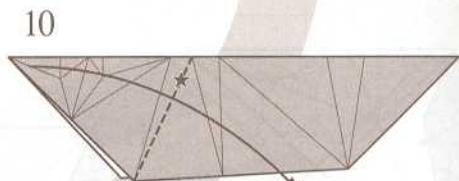
しっかりと折り筋を
つけてから2の形に戻す



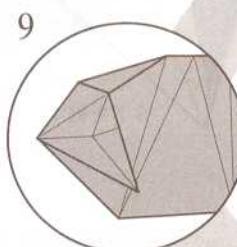
12



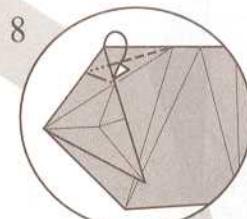
○の折り筋と縁を
合わせて折る



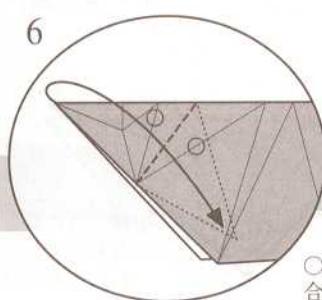
10



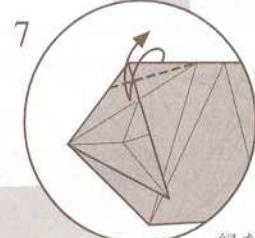
しっかりと折り筋を
つけてから2の
形に戻す



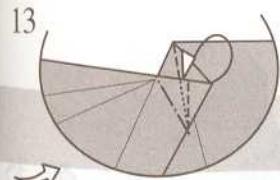
カドを内側に
折る



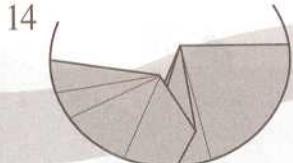
○と○の折り筋を
合わせて折る



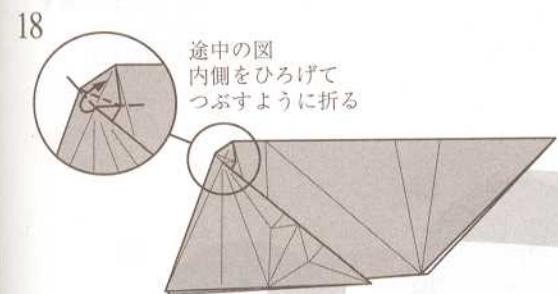
縁を折り筋に
合わせて
折り筋をつける



カドを内側に
折る



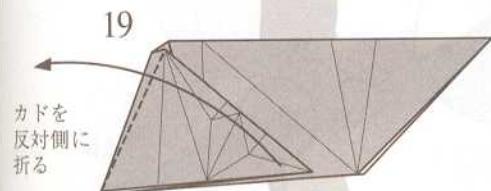
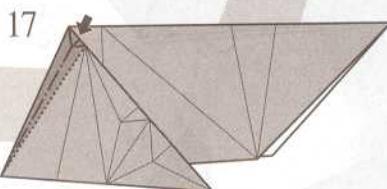
しっかりと折り筋を
つけてから10の形に戻す



途中の図
内側をひろげて
つぶすように折る

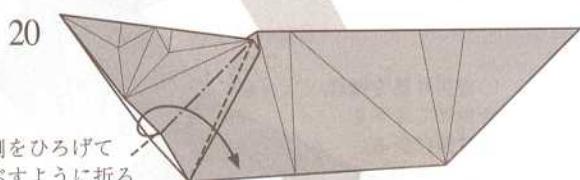


★の
折り筋で
折る

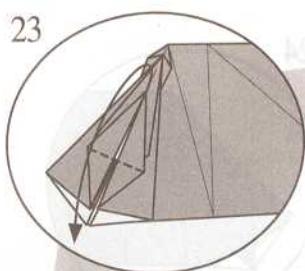


カドを
反対側に
折る

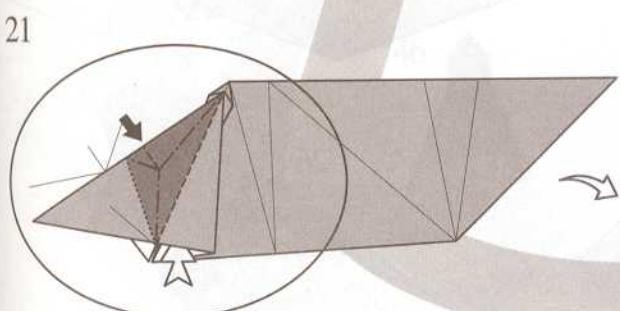
黒矢印の部分を
押し込むように
内側をひろげて
■の部分を
ついている折り筋で
折りまとめる



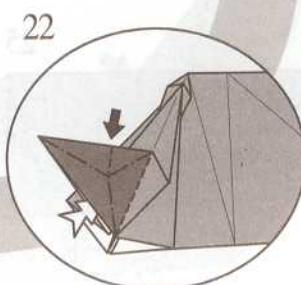
内側をひろげて
つぶすように折る



カドを下に折る

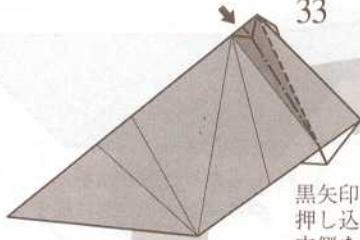


黒矢印の部分を押し込むように
内側をひろげて■の部分を
ついている折り筋で折りまとめる



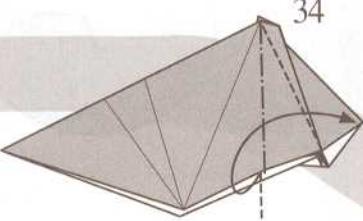
黒矢印の部分を
押し込むように
内側をひろげて
■の部分を
ついている折り筋で
折りまとめる

33



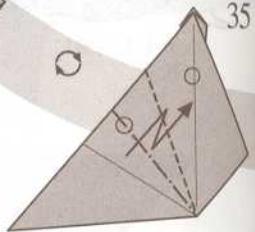
黒矢印の部分を
押し込むように
内側をひろげて
■の部分を
ついている折り筋で
折りまとめる

34



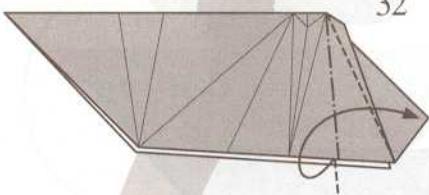
内側をひろげて
つぶすように折る

35



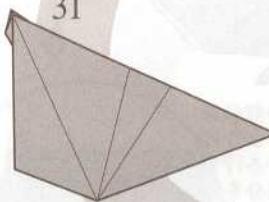
○と○の折り筋を
合わせて
斜めに段折り

32

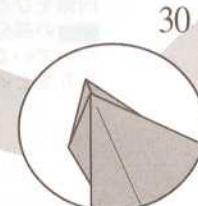


内側を
ひろげて
つぶすように
折る

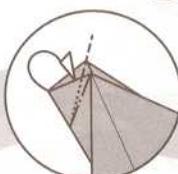
31



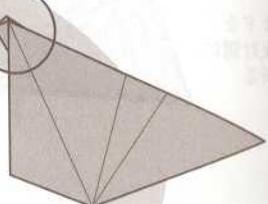
しっかりと
折り筋をつけて
25の形まで戻す



29

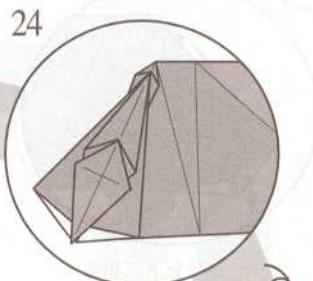


28



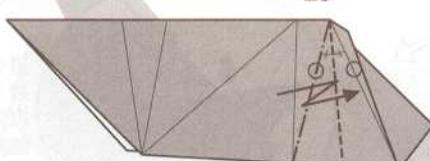
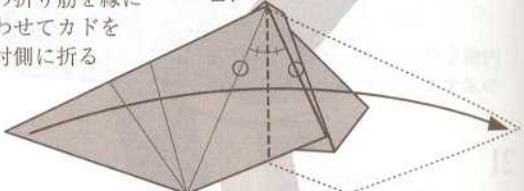
縁と縁を合わせて
カドを内側に折る

24



○の折り筋を縁に
合わせてカドを
反対側に折る

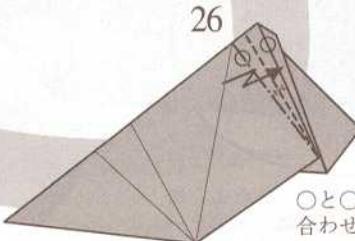
27



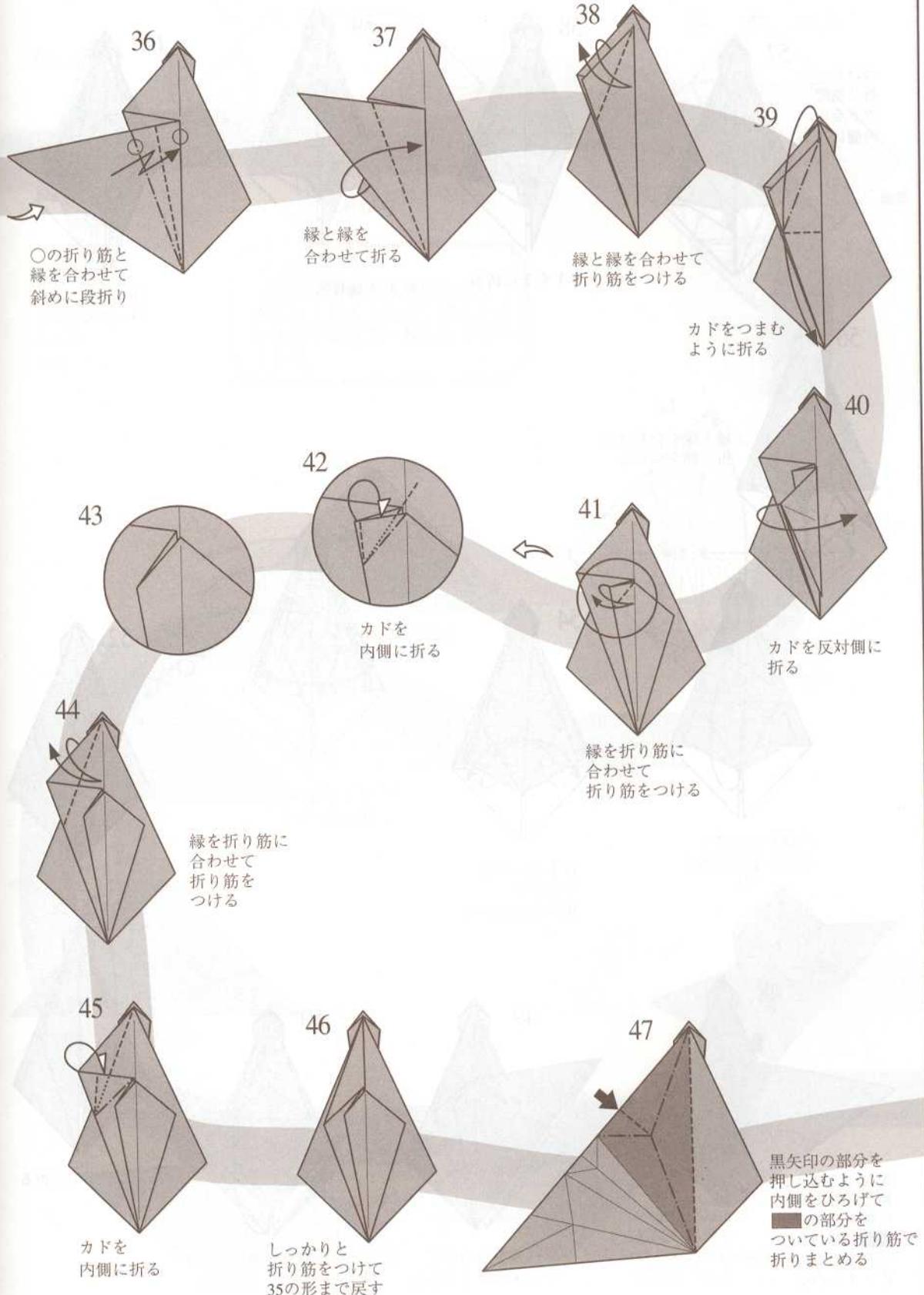
25

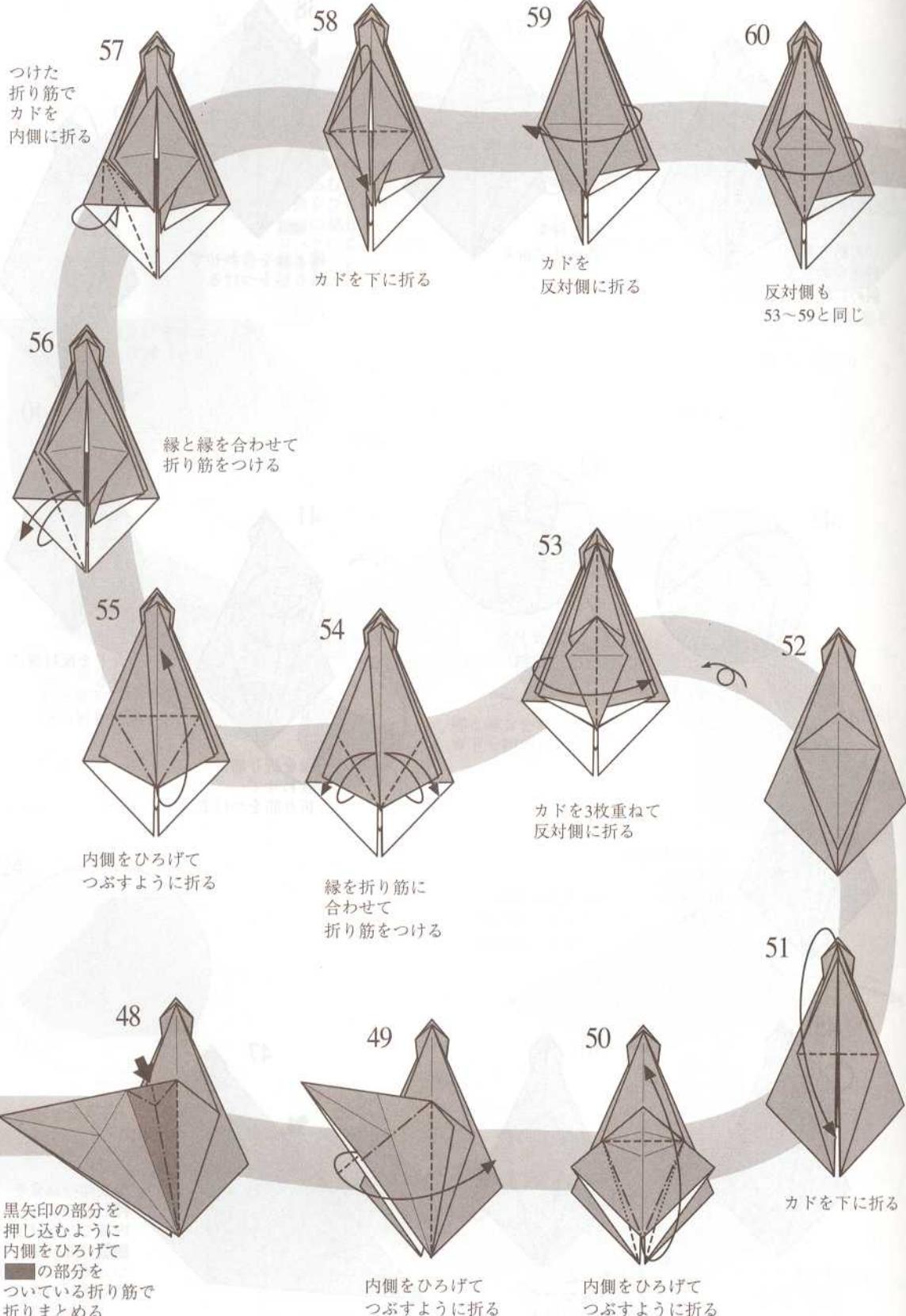
○と○の折り筋を
合わせて
斜めに段折り

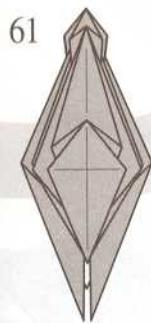
26



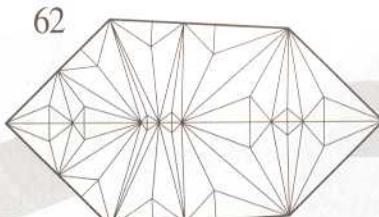
○と○の折り筋を
合わせて
斜めに段折り



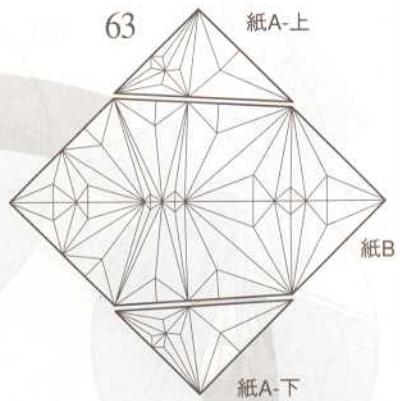




しっかりと
折り筋をつけて
全部ひろげる



[部分B]の
できあがり

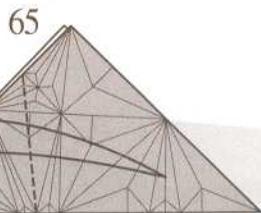


紙A-上

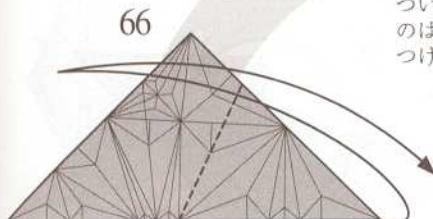
紙B

紙A-下

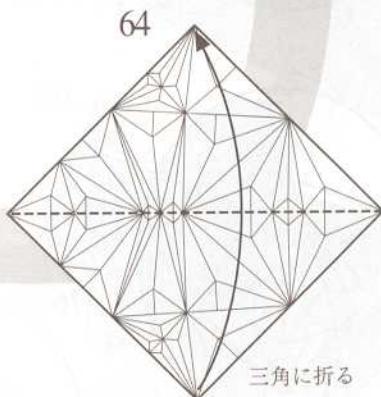
-作者より-
ここまで用紙を仮想的に分けて
表示してきましたが、ここから
はまた不切正方一枚として表示
します。



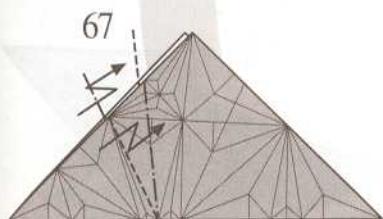
ついている折り筋を
のばして折り筋を
つける



ついている折り筋を
のばして折り筋を
つける

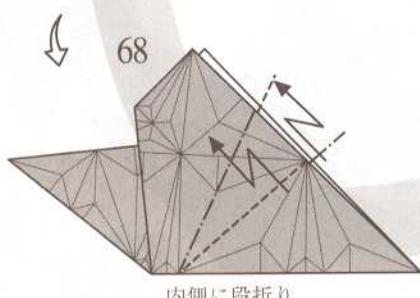
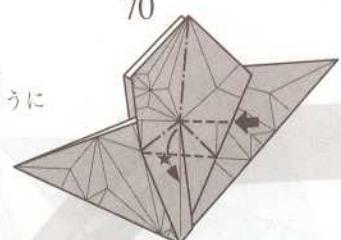


三角に折る

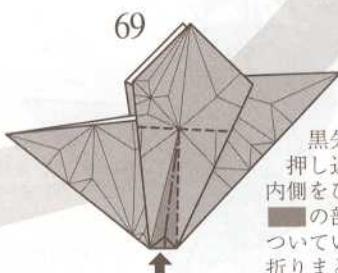


内側に段折り

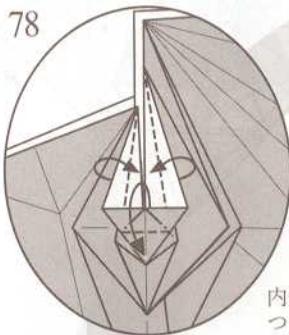
★のところを
カドにするように
ついている
折り筋で
折りまとめる



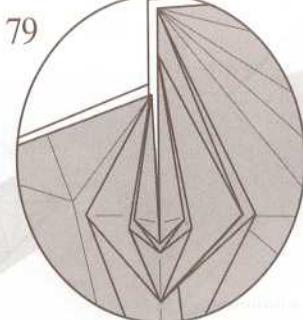
内側に段折り



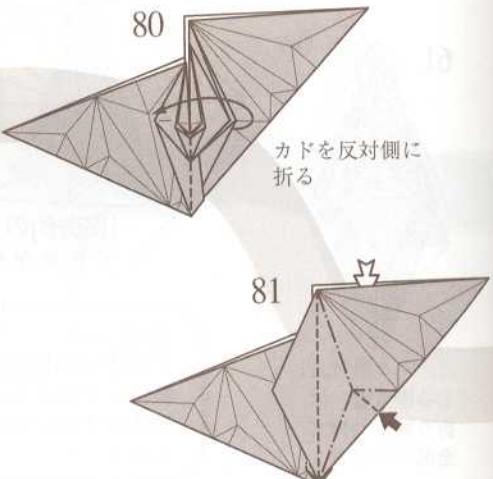
黒矢印の部分を
押し込むように
内側をひろげて
■の部分を
ついている折り筋で
折りまとめる



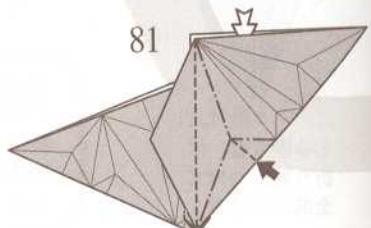
内側をひろげて
つぶすように折る



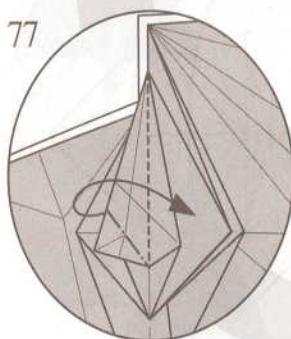
反対側も
74～78と同じ
ように折る



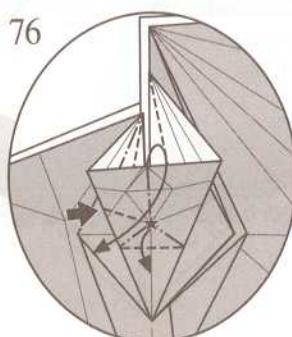
カドを反対側に
折る



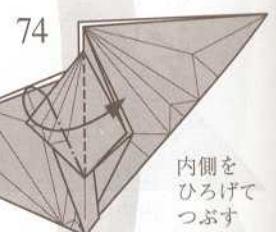
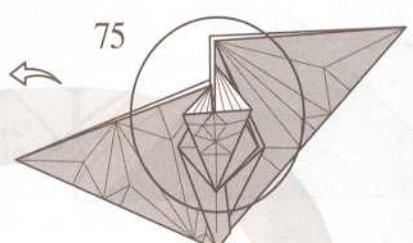
内側をひろげて
黒矢印の部分を
押し込んで
ついている折り筋で
折りまとめる



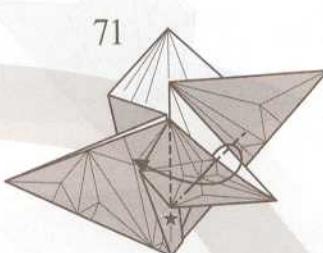
内側をひろげて
つぶすように折る



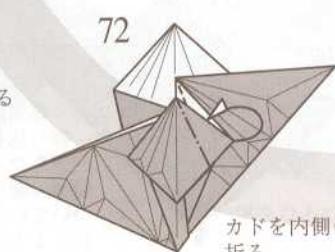
★のところが
カドになるように
ついている
折り筋で
折りまとめる



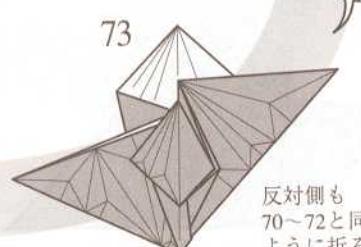
内側を
ひろげて
つぶす
ように折る



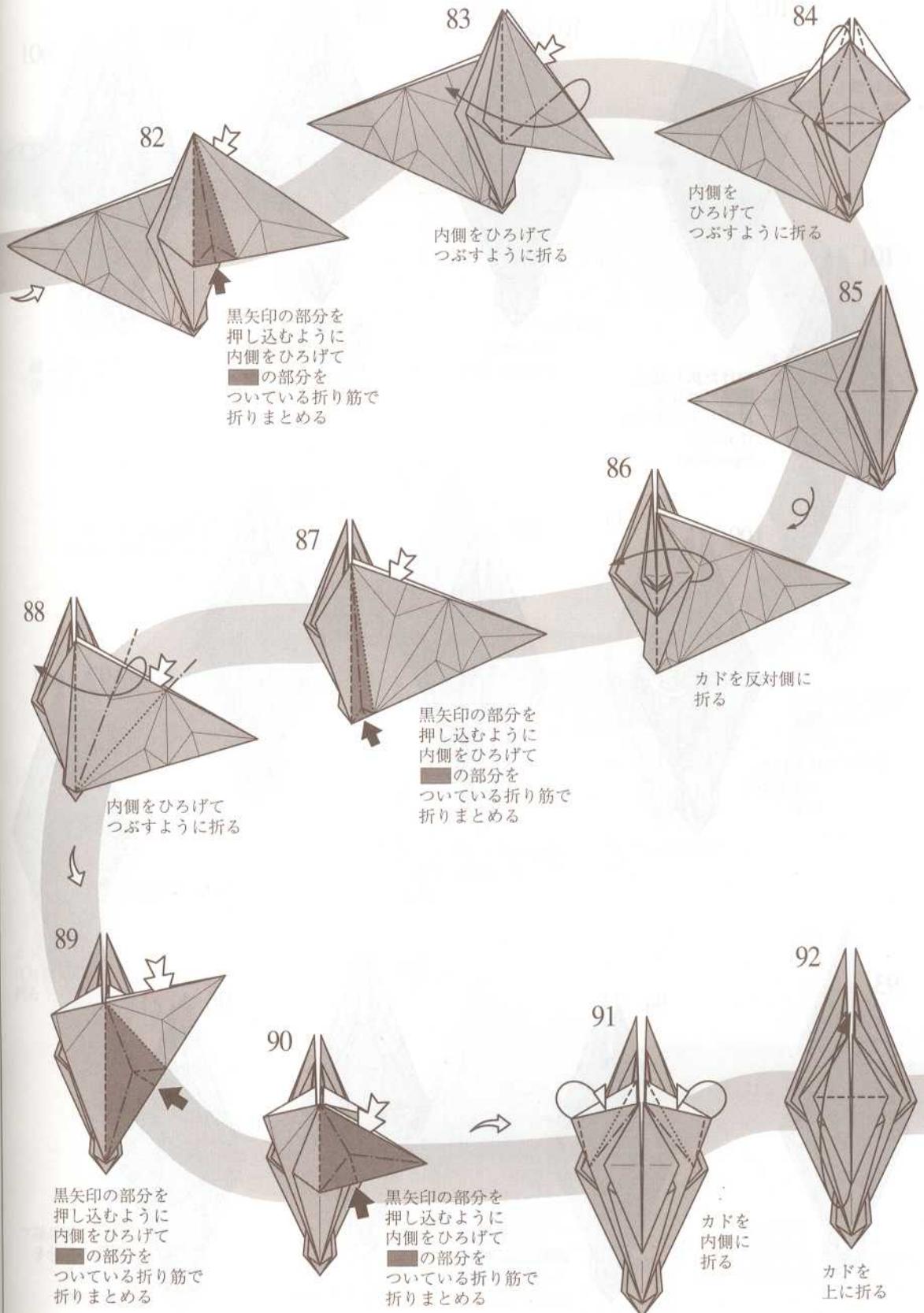
内側をひろげて
つぶすように折る

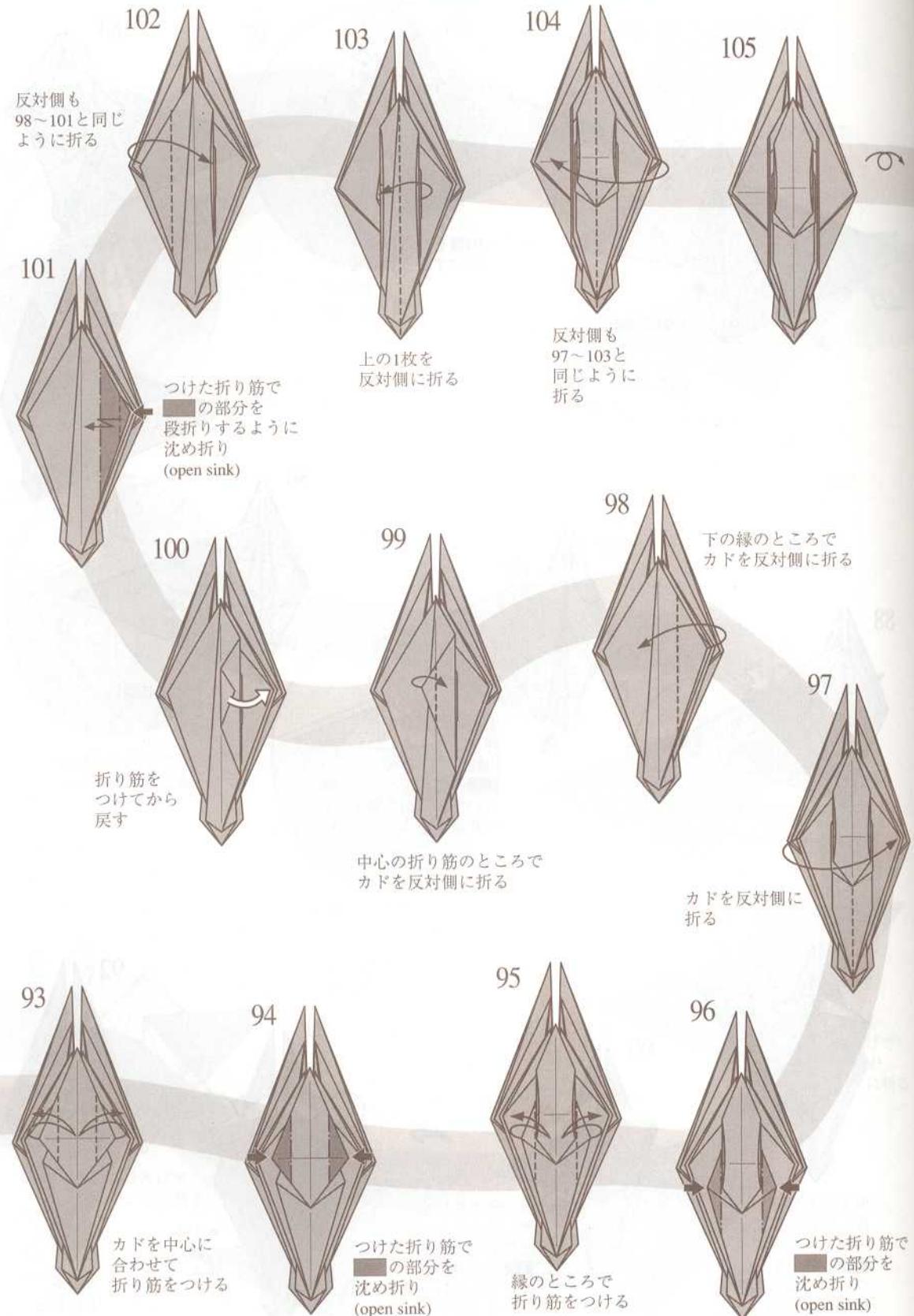


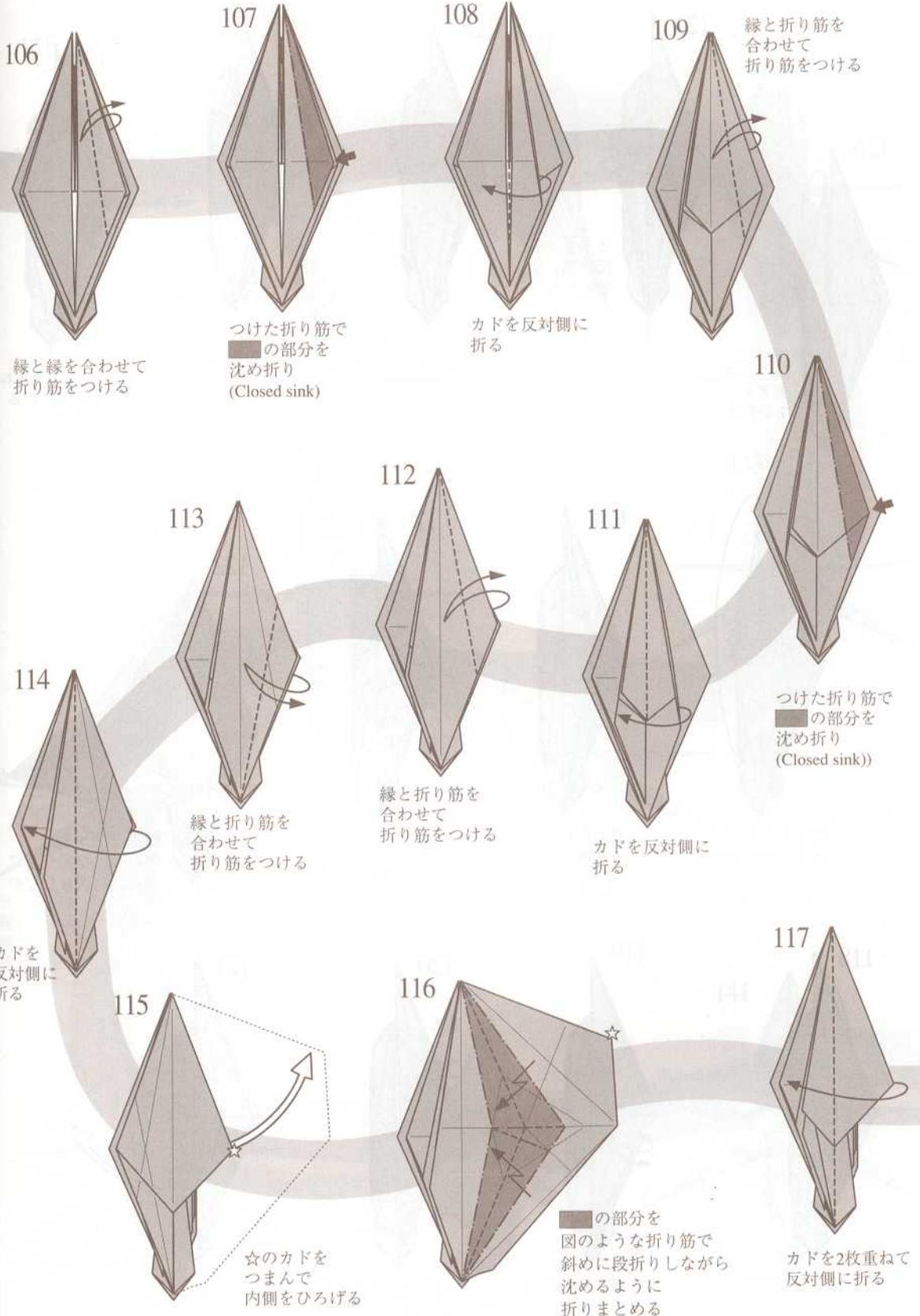
カドを内側に
折る



反対側も
70～72と同じ
ように折る



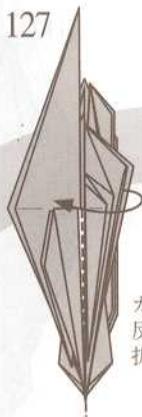




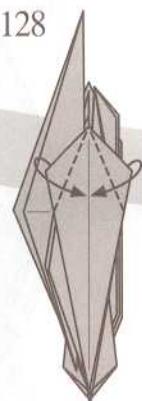
126



127



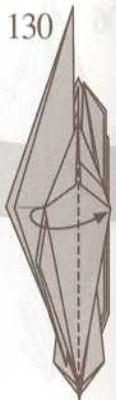
128



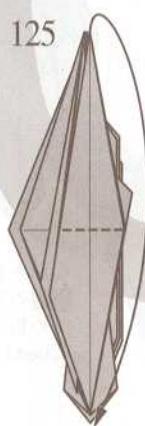
129



130



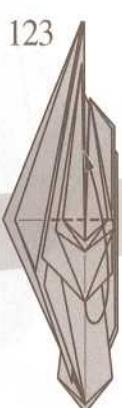
125



124



123



122



118



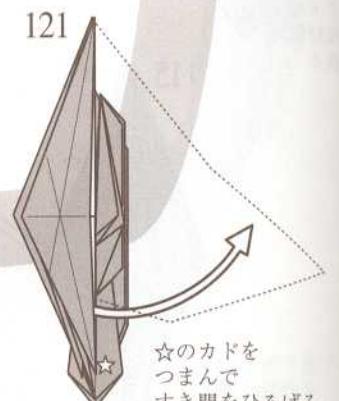
119

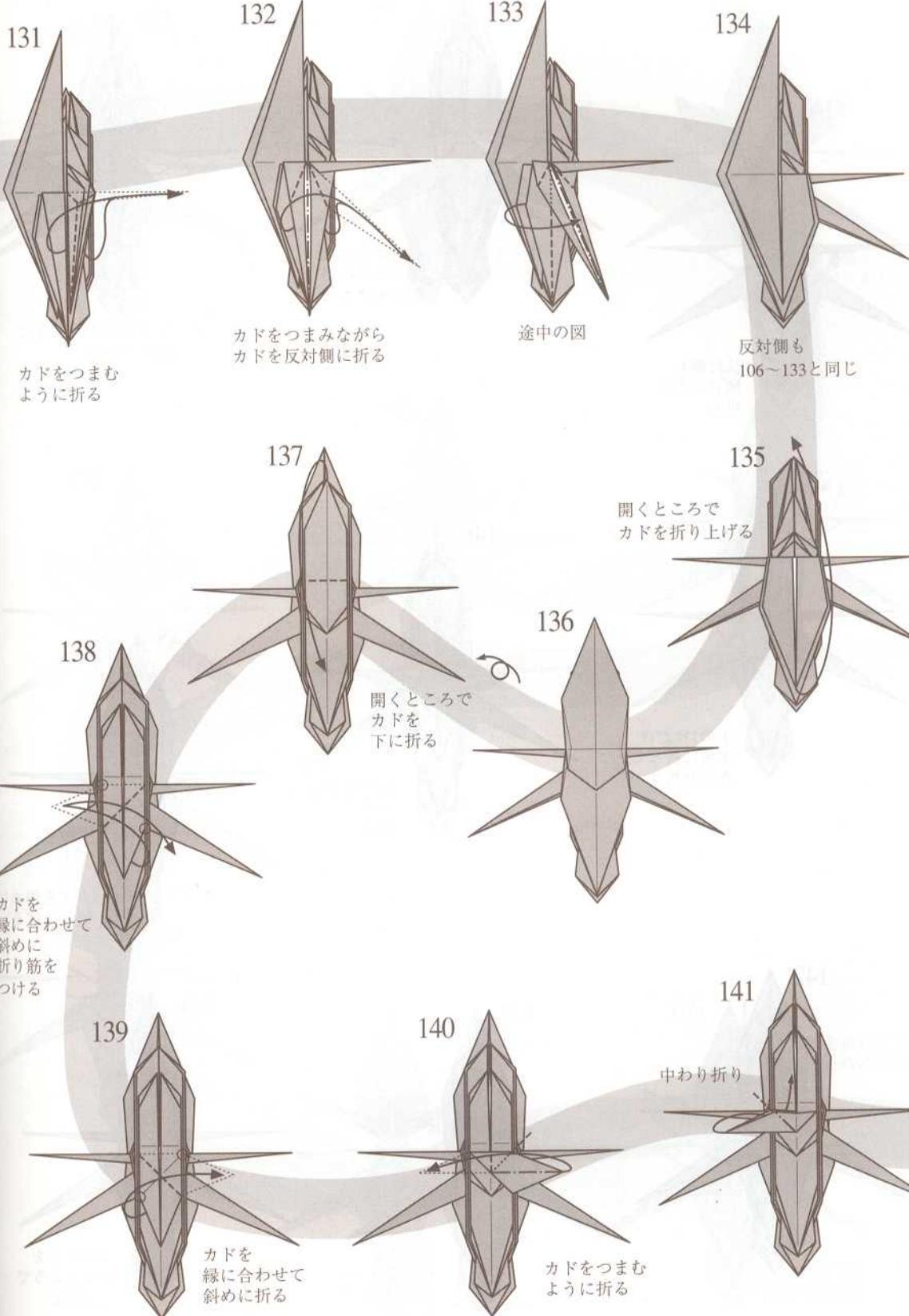


120

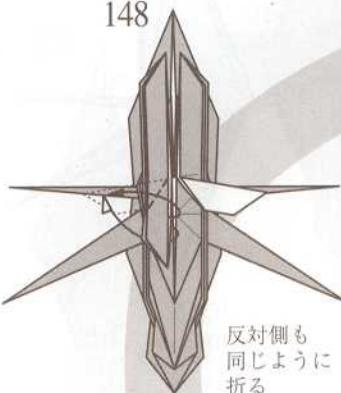


121



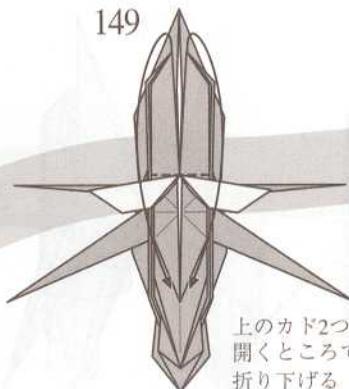


148



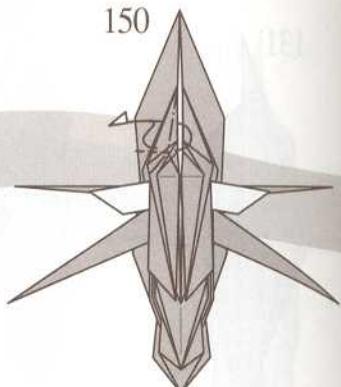
反対側も
同じように
折る

149



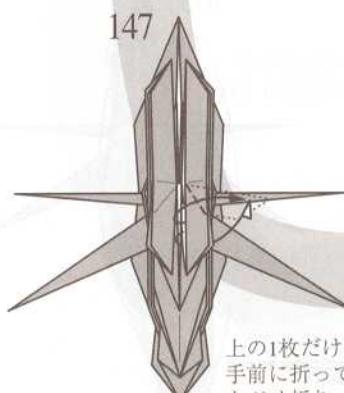
上のカド2つを
開くところで
折り下げる

150



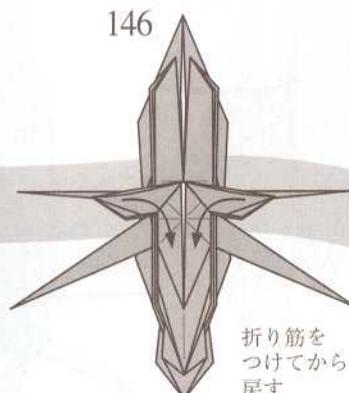
カドをつまむように
後ろへ折る

147



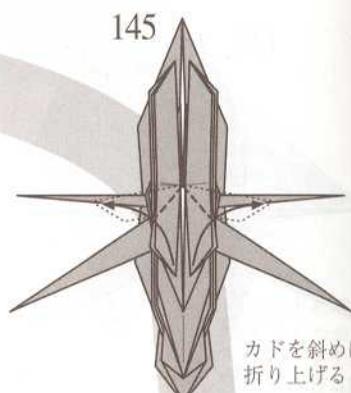
上の1枚だけ
手前に折って
かぶせ折り

146



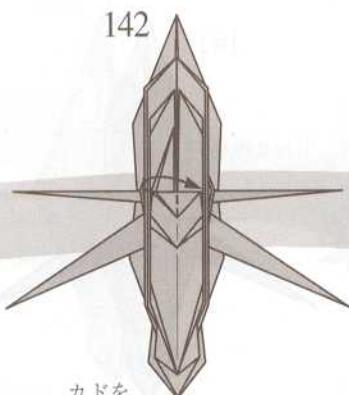
折り筋を
つけてから
戻す

145



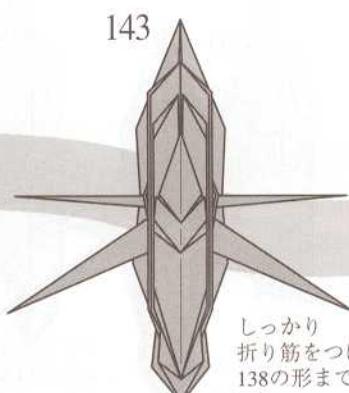
カドを斜めに
折り上げる

142



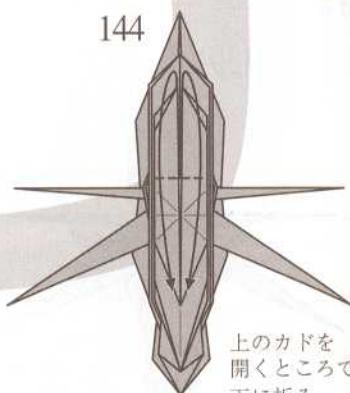
カドを
反対側に折る

143

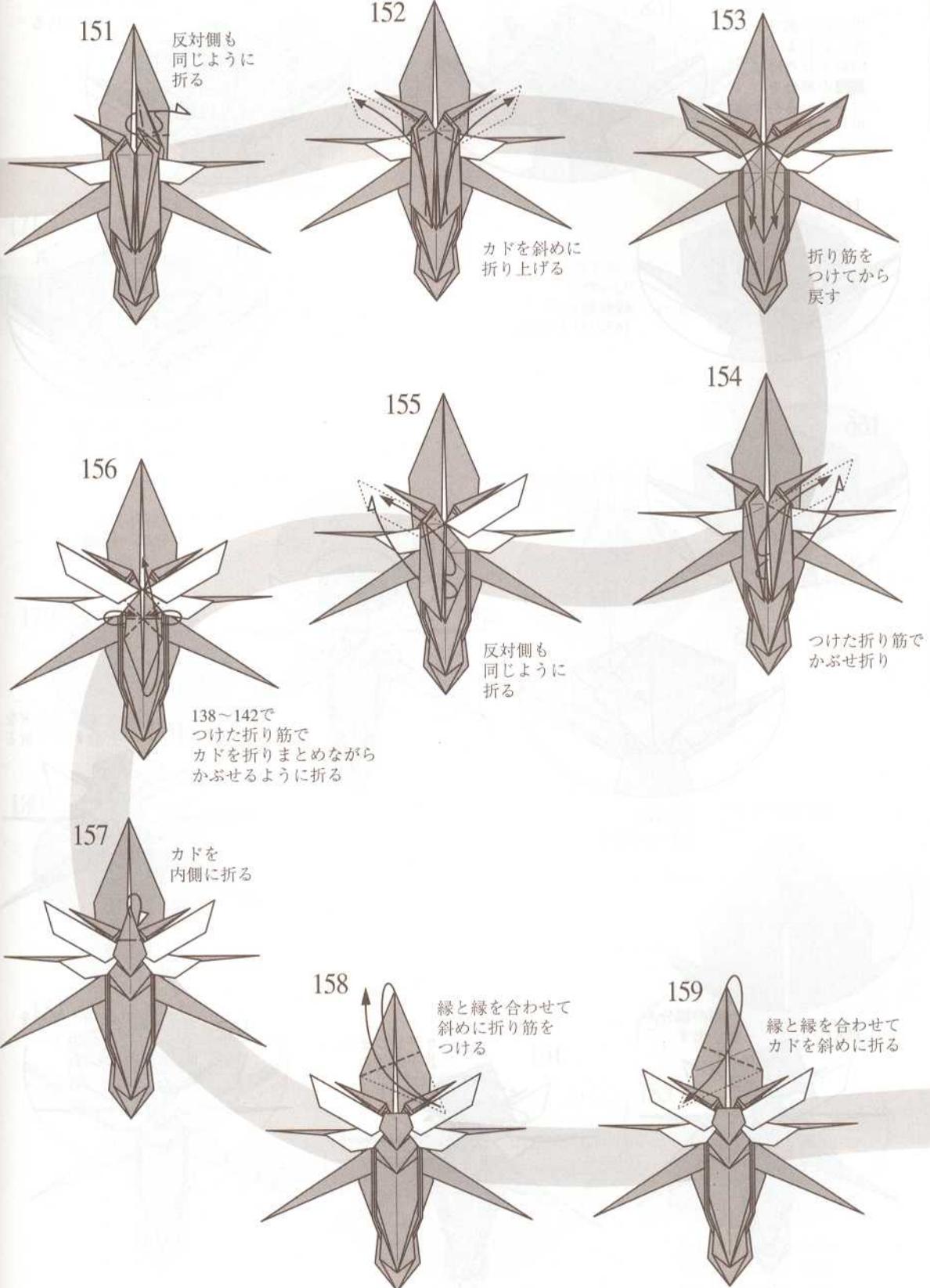


しっかり
折り筋をつけて
138の形まで
戻す

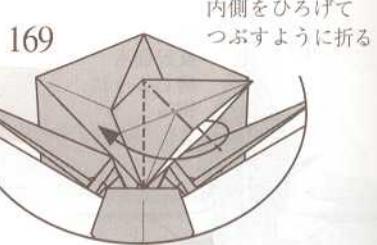
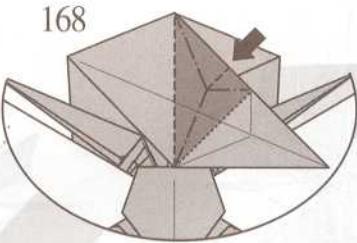
144



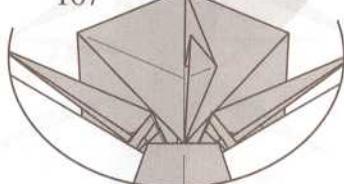
上のカドを
開くところで
下に折る



黒矢印の部分を
押し込むように
内側をひろげて
■の部分を
ついている折り筋で
折りまとめる

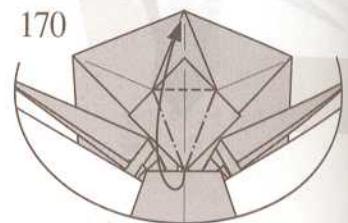


167

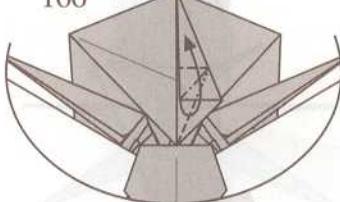


しっかりと
折り筋をつけて
163の形まで戻す

170

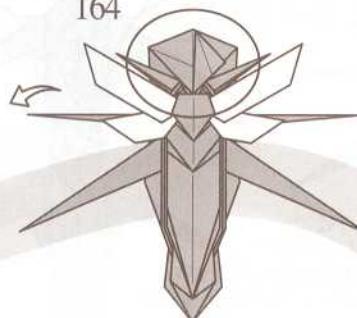


166

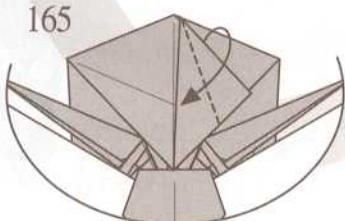


カドをつまむ
ように折る

164

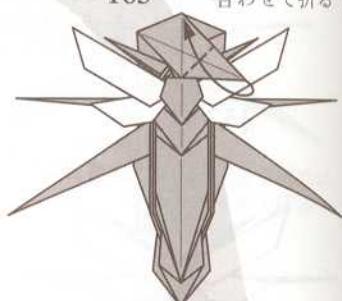


165

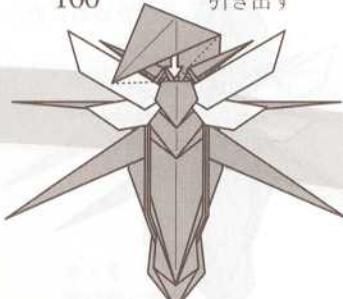


縁と縁を
合わせて折る

163

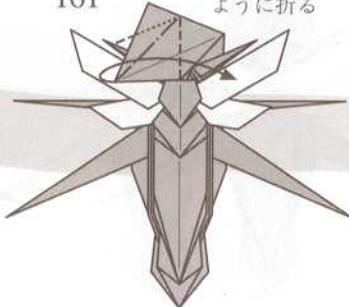


160



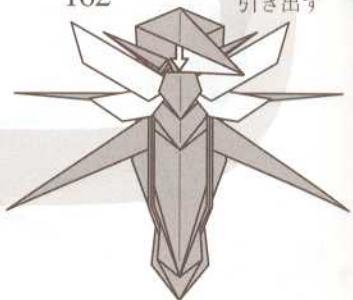
内側の部分を
引き出す

161

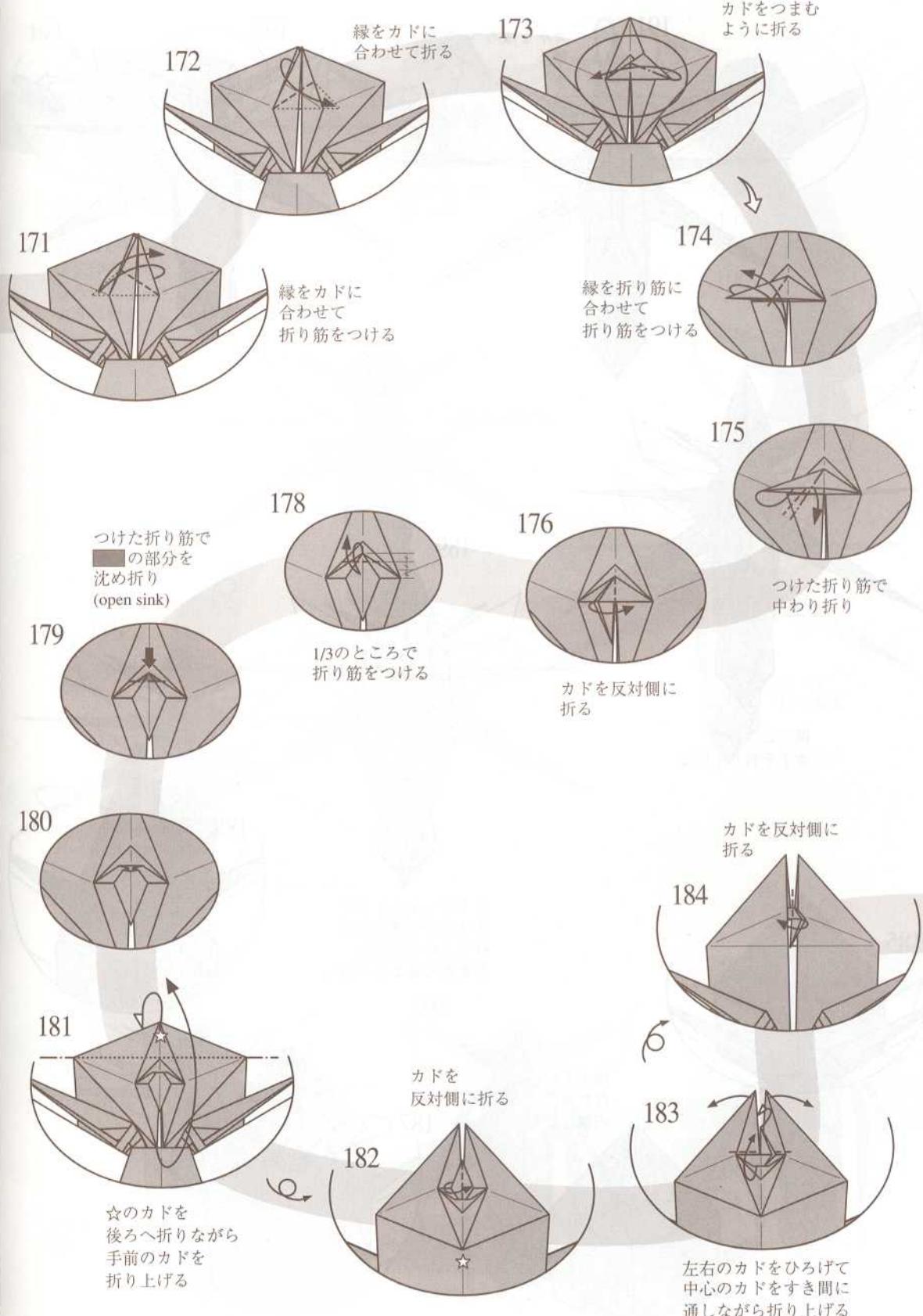


カドをつまむ
ように折る

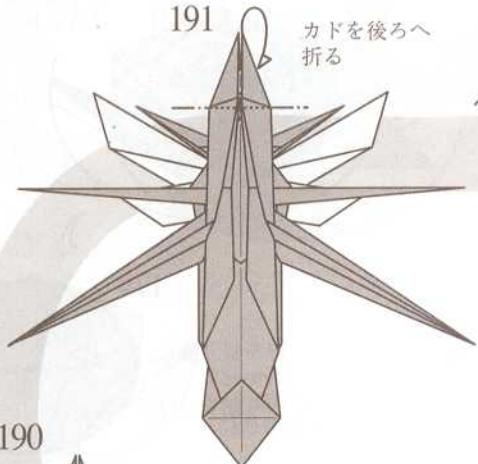
162



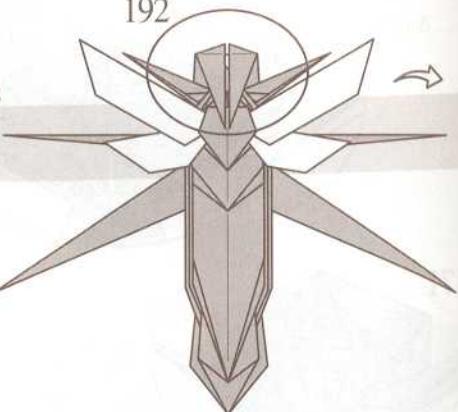
内側の部分を
引き出す



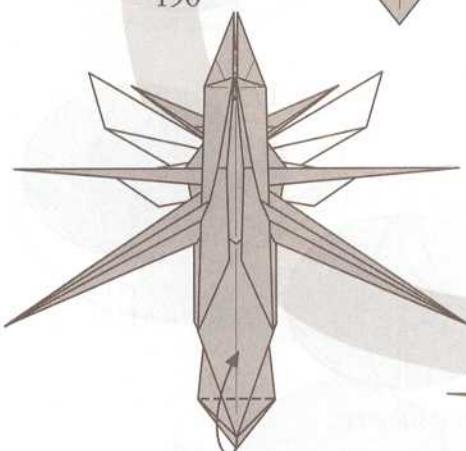
191 カドを後ろへ
折る



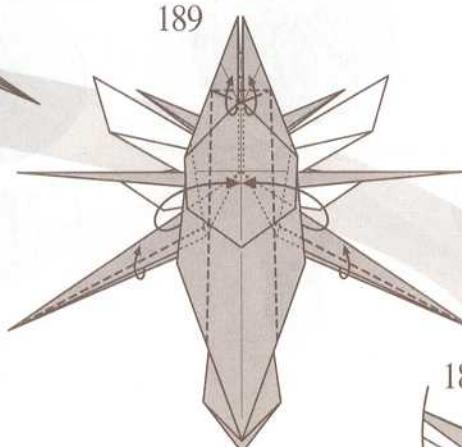
192



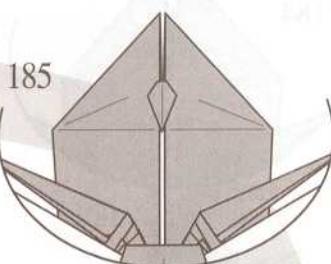
190



189



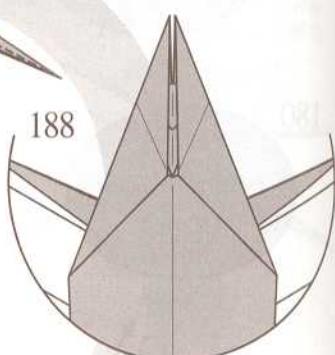
開くところで
カドを折り上げる



185

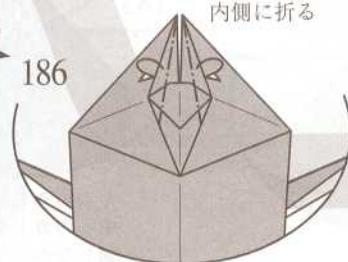
カドをつまむように
折りながら連られて
持ち上がる部分を
引き寄せるように折る

188

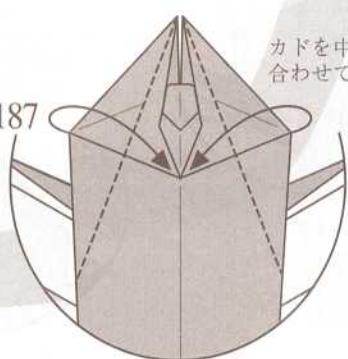


縁をを中心に
合わせて
内側に折る

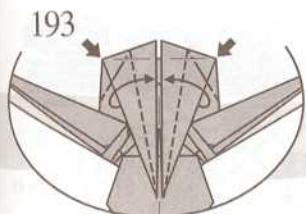
186



187



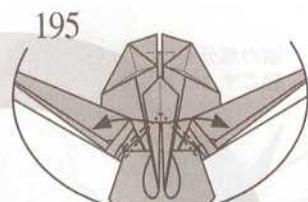
カドを中心には
わせて折る



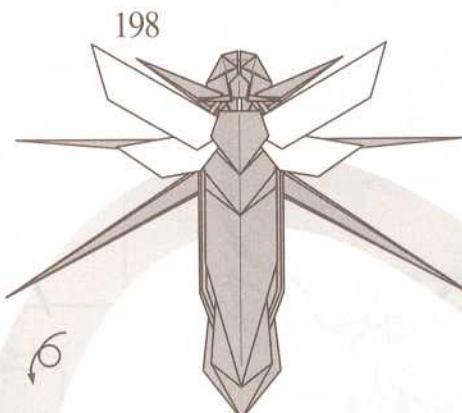
縁を中心に合わせて
折りながら
黒矢印の部分を
ひろげてつぶす
ように折る



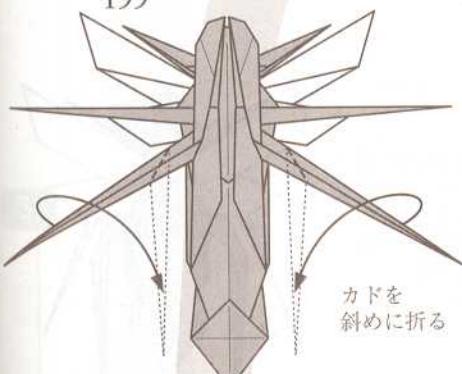
内側の部分を
外に出す



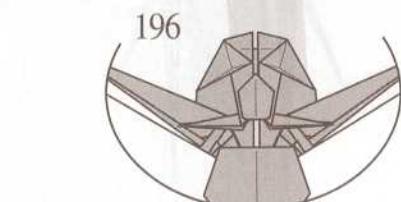
中わり折り



199



カドを
斜めに折る

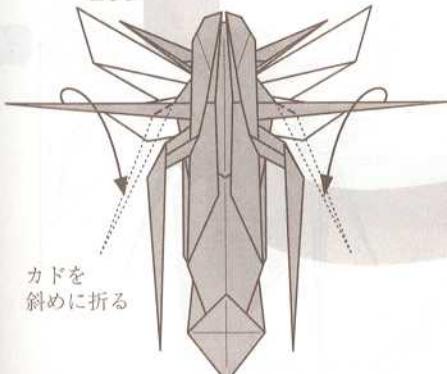


197



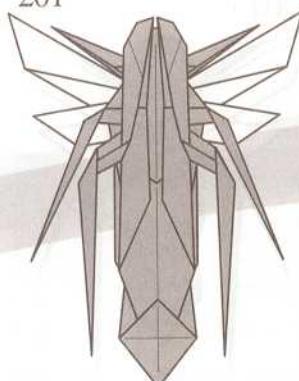
カドを
細く折る

200

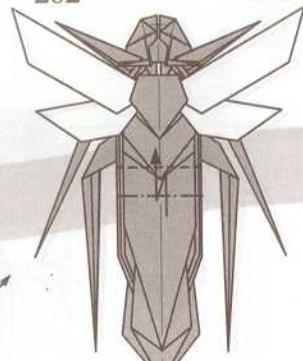


カドを
斜めに折る

201



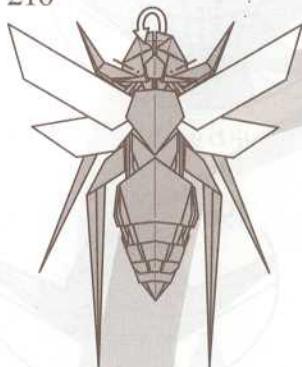
202



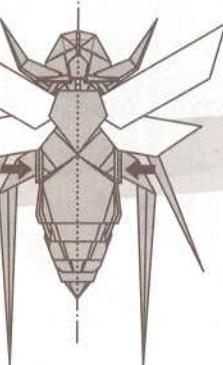
段折り

210

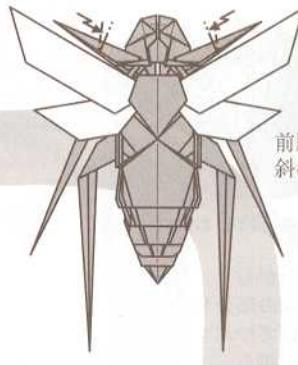
頭の部分を
起こすようにする



209



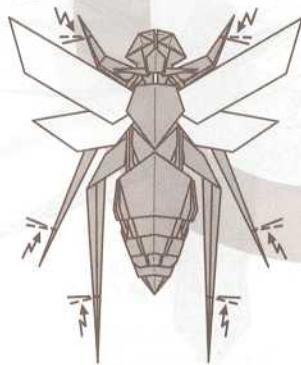
208



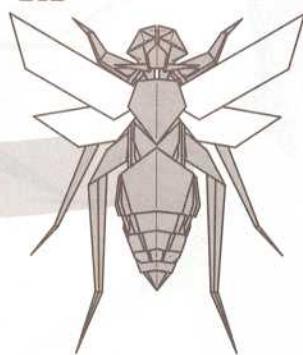
前脚を
斜めに段折り

211

脚の先を
斜めに段折り

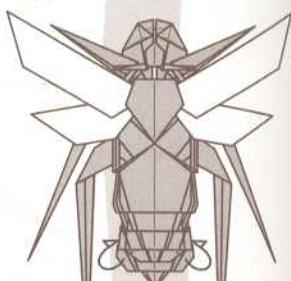


212



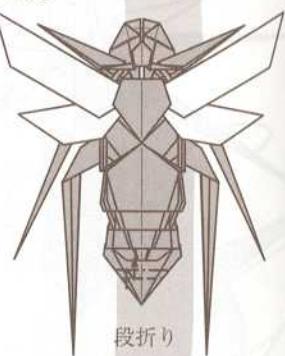
できあがり

207



カドを
内側に折る

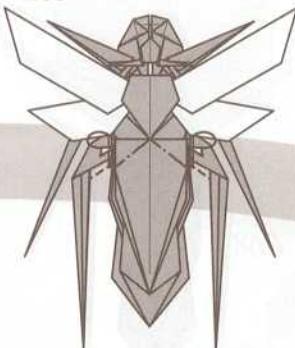
206



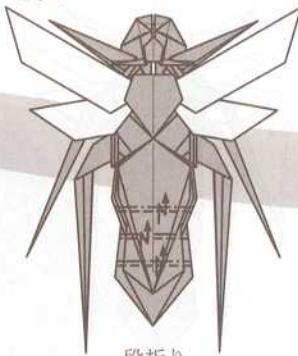
段折り

203

カドを
内側に折る

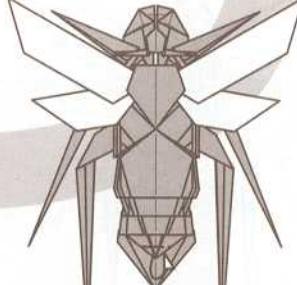


204



段折り

205



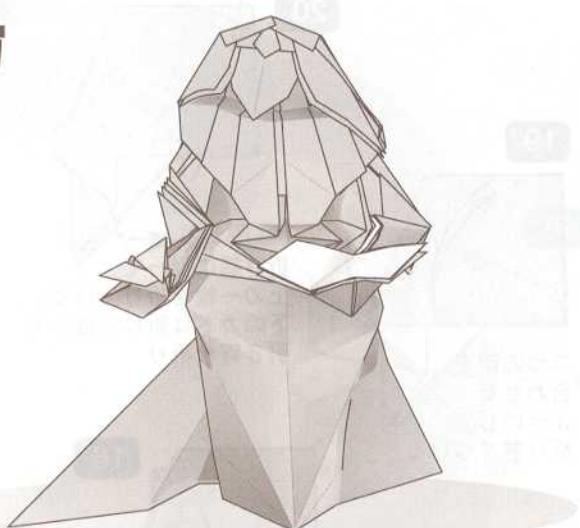
カドを
内側に折る

掌の中の小鳥

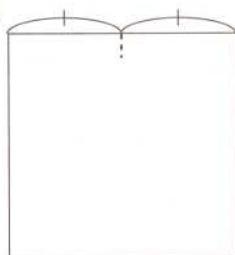
創作 2001/1/25
作図 2003/8/3

作 / 図 渡辺 大

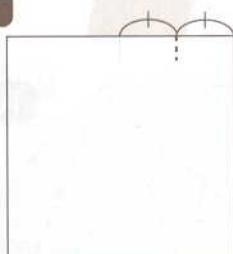
Model and Diagrams by *Dai Watanabe*



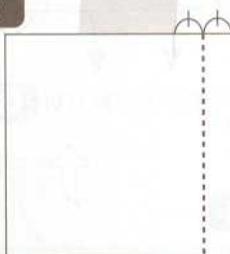
1



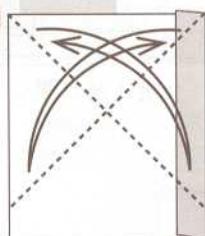
2



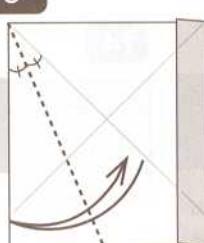
3



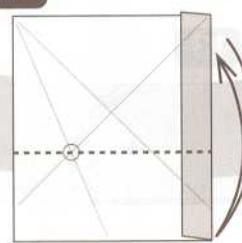
4



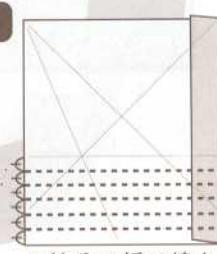
5



6



7

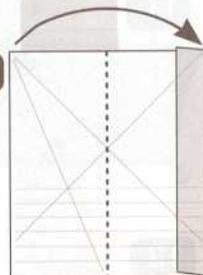


ご参考までに...(1) / / / / / / / / / /
1/8 という分割は近似的なものです。
理想的な分割に比べると、紙の大きさに
対して 1% 以下の誤差が生じます。
この誤差が意味を持つのは本を折り出す
時だけなのですが、この誤差を許せない
方は理想的な分割を与える方法を追求
してみてください。

9



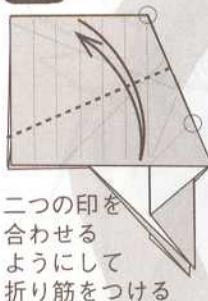
8



半分に折る

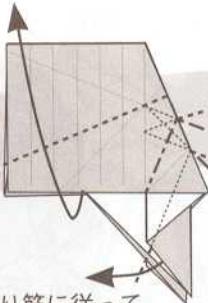
6 等分の折り線を
つける

19



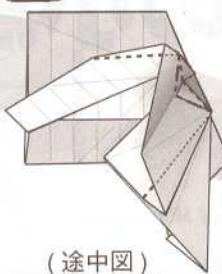
二つの印を
合わせる
ようにして
折り筋をつける

20



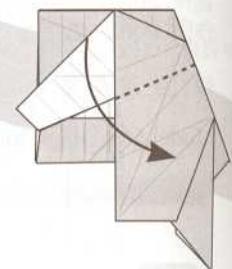
折り筋に従って
上の一枚を折り上げる。
下のカドは折りに従って
引き寄せ折り

21



(途中図)

22



10



11



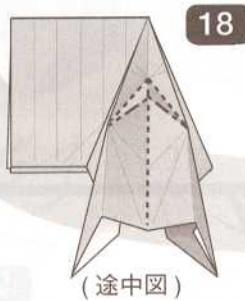
12



13

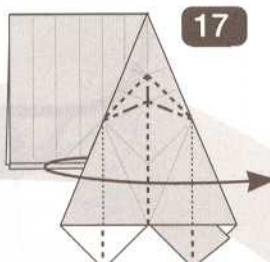


14



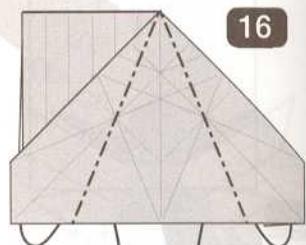
(途中図)

17



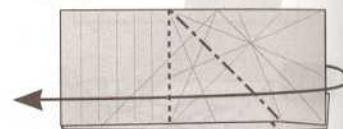
付いている
折り線で
折りたたむ

16



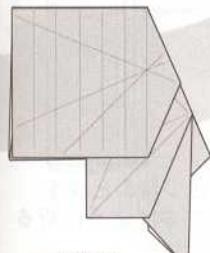
両側とも中割り折り

15

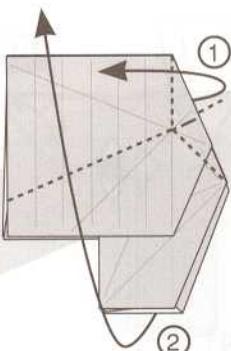


大きく折り開く

23

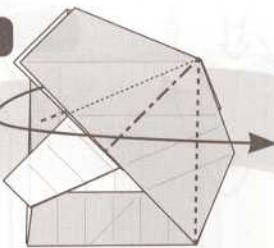
反対側も
同じに折る

24



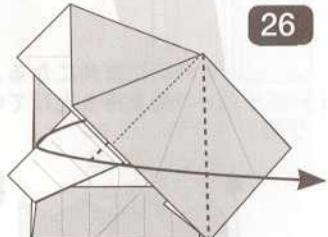
1. 上から2枚目の
ヒダで折り開く
2. 一番下だけ残して
付いている折り線で
折り上げる

25



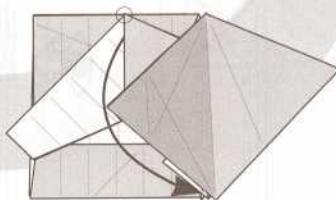
上の1枚を折り開く

26

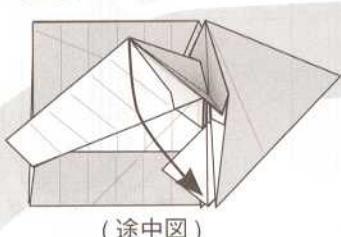


次の1枚も折り開く

27

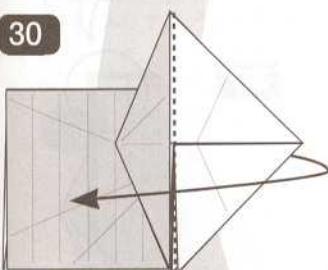
色の濃い部分を持ち上げて
○印のついたカドを
引き下ろす

28



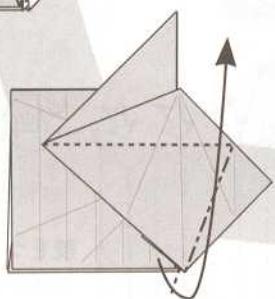
(途中図)

30



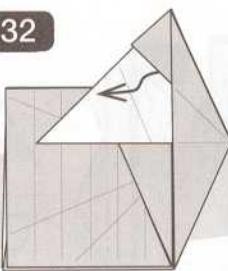
花弁折り

31

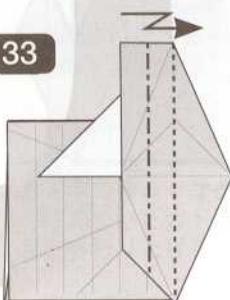


こちら側も花弁折り

32

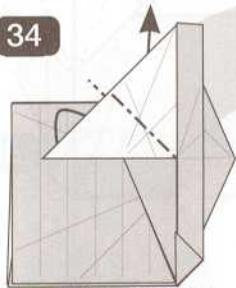
中に折り込まれている
紙を引き出す

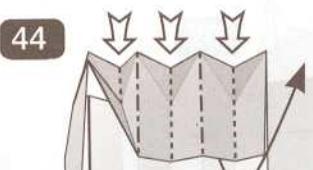
33



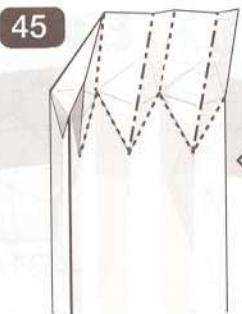
開いてつぶすように折る

34

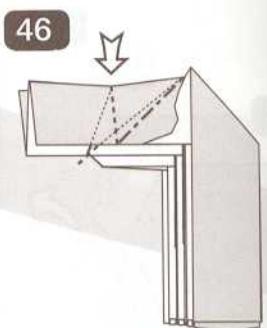




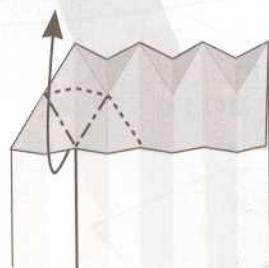
下の紙に直角になるように
上の紙を持ち上げていく



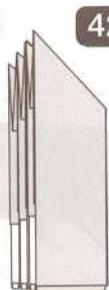
(途中図)



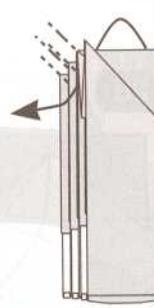
2つ目のヒダを
つぶすように折る



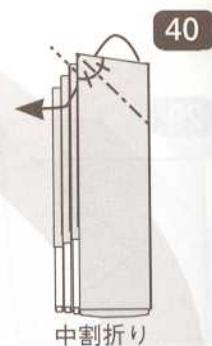
43



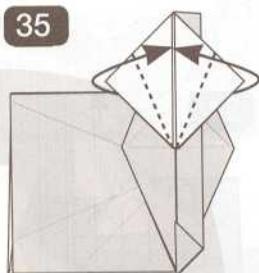
42



41



40



35

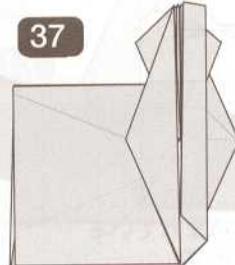
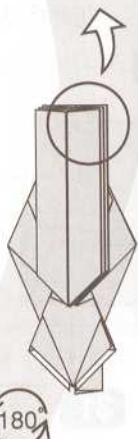
残り二つのヒダも
同様に折る



36

後ろに隠れている
カドを手前に
引き出す

39



37

38

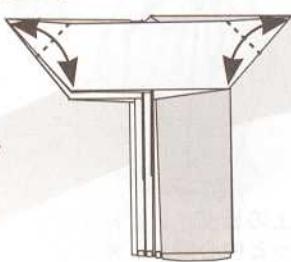


稜をつぶすように
しながら段折り

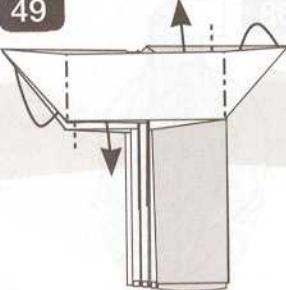
47



48

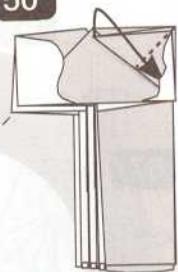


49



両側とも中割折り
左右で折り込む
向きが違います

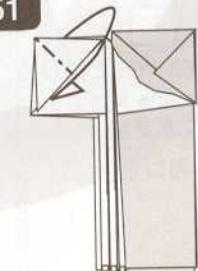
50



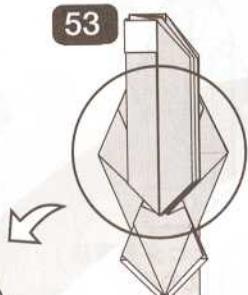
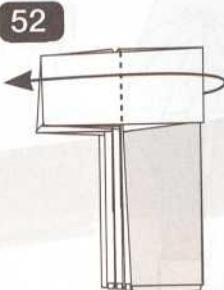
(一番上の一枚を透視)
48でつけた折り筋で
奥に折り込む
(止め折りです)

51

51



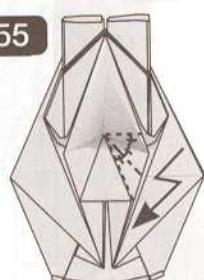
52



(これも透視です)
今度は向こう側に
折り込む

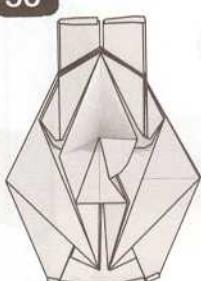
(上のカドを持ち上げた状態)
山をつぶすように折る

55



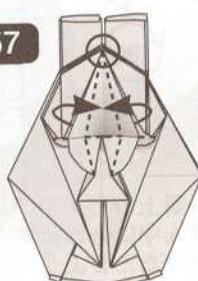
一枚後ろのヒダを
真ん中に引き寄せ
ながら段折り

56



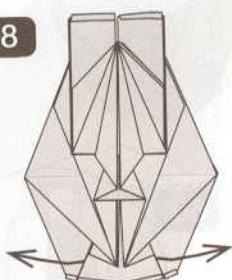
反対側も同じ

57



一番上のヒダを
真ん中に合わせながら
○印のついたカドを
目一杯折り上げる

58



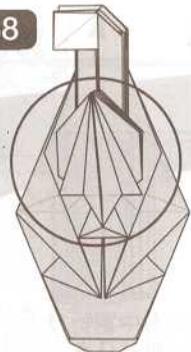
後ろに巻き込んである
紙を引き出す

67

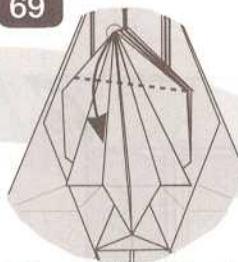


反対側も 63~66 と同じ
(2 の open sink は
無視してください)

68

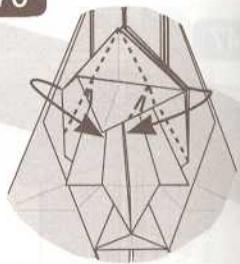


69



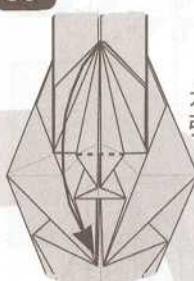
一番上のヒダだけ折ります。
ちょっと中心線から外れて
いるのに注意してください。

70



顔の輪郭を取りながら
引き寄せ折り

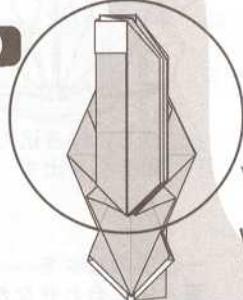
59



カドをまとめて
引き下ろす

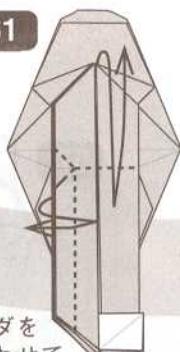
下のヒダも同じ

60



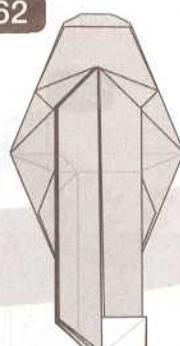
一番上のヒダを
真ん中に合わせて
折りたたむようにして
折り筋をつける

61



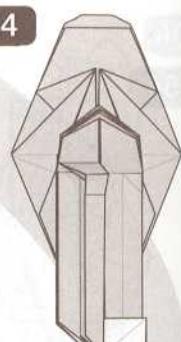
180°

62



下2枚と左側のヒダも
同様の折り筋をつける

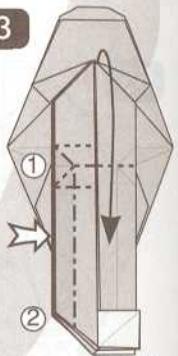
64



(途中図)

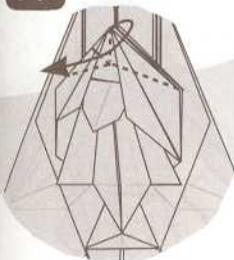
ご参考までに ... (2) 、
69 以降の行程は顔の折り出しなので
ぐらい折りばかりです。
各自工夫してください。
また、70 で顔の角度が傾くのは
「小鳥を見る」ポーズをつけるためです。

63



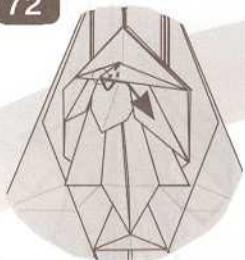
1 と 2 を沈め折り
(open sink) しながら
上のカドを畳みこむ

71



カドを一枚だけ
つまみ折り

72



つまんでできたカドを
開いてつぶすように折る

73

74

75

75

開いてつぶす
ように折る

75でつぶした
ヒダを折り開く

76

中のヒダを1枚だけ
折り開く

78

次のヒダも開いて
つぶすように折る
(引っかかるところが
あります。
次図を参考にして
カドをつぶしながら
折ってください)

79

74~78で折ったヒダ
(3枚)を元に戻す

80

左側のヒダを
1枚だけ折り開く

82

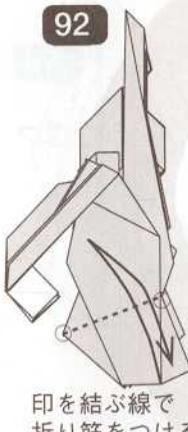
上の1枚だけ折る

81

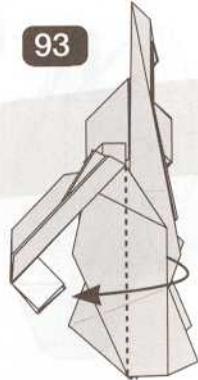
左側も74~79と
同じように折る

165

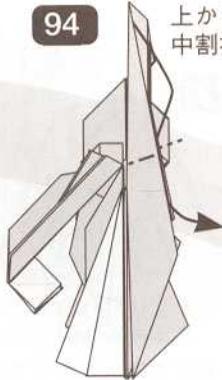
92



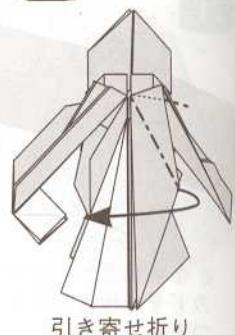
93



94



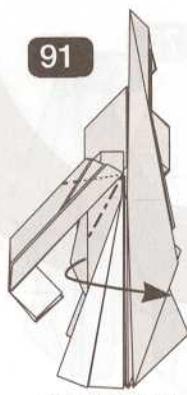
95



83



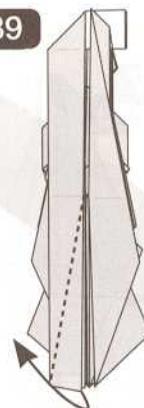
91



90



89

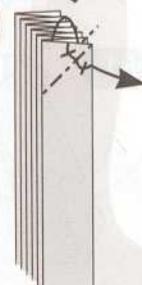


88



ご参考までに...(3)しまった...小鳥の折り出しは67の後に入れるべきでした。書き直す気力が残っていないのでここに入れます。ご参考までに、私は最後の仕上げと一緒に折っています。

84

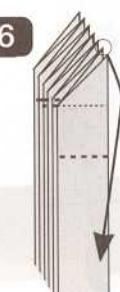


85



残りの5つのヒダも同様に折る

86

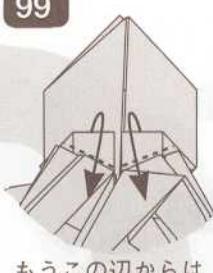
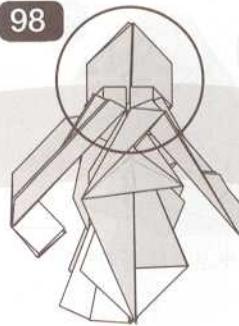
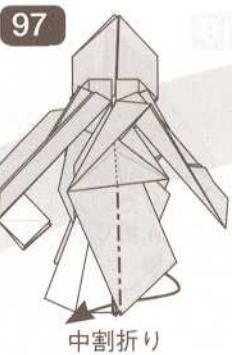
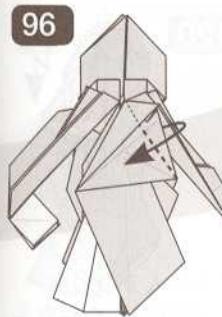


2つ目のカドをつぶしながら1つ目のカドを引き下げる

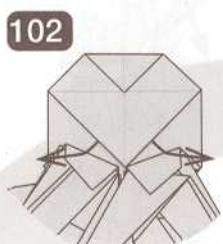
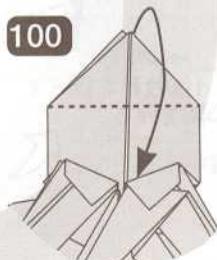
87



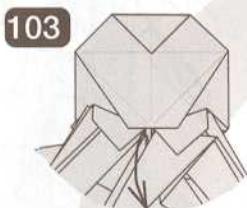
同様の折りを2回繰り返す



もうこの辺からは
できとうに ...



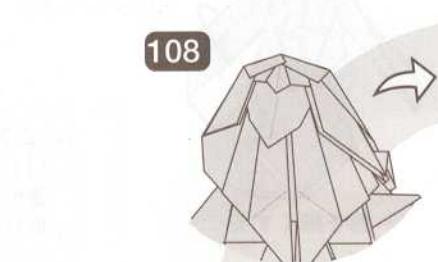
102



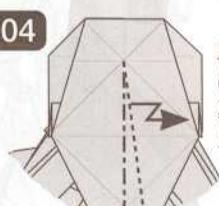
103

中の紙をずらすように
して引き出す

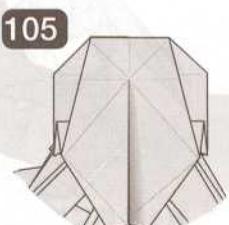
ヒダを下にひっぱる
ように折る
(西川虎折り)



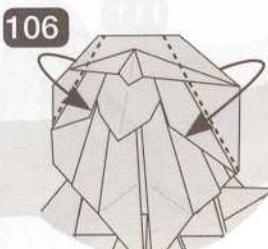
108



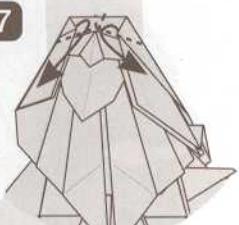
段折り
(立体化します)
裏でできとうに
止め折り



105



106

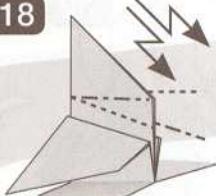


107

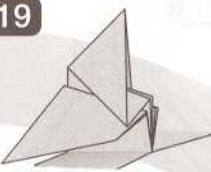
両側のカドを
引き出しながら
つまみ折り

上のヒダの縁に沿って折る

118



119

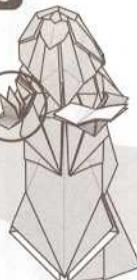


117

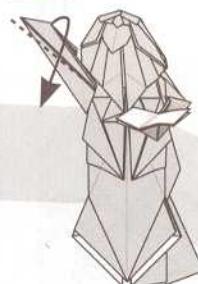


1,3枚目を折って
羽を作る

116

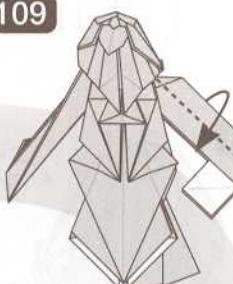


115



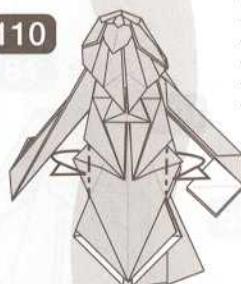
腕を手前に持ち上げながら
丸く折る

109



腕を細くする

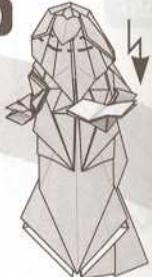
110



一番上の紙だけ折る

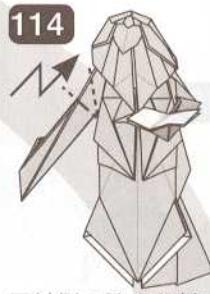
ご参考までに ... (4) ...
111以降の行程は立体工程になります。
造形的にかなり苦しいです ...
折りにも無理があり、ウェットフォールディングなどを使わないと形が決まりません。
工程115では、自然に発生する立体(小鳥より先の部分が平面にならない)を利用して掌を表現しています。

120



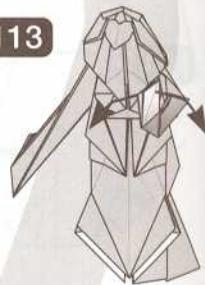
立体的に段折り
胸部と肩を成形します
(以下、両腕を省略)

114



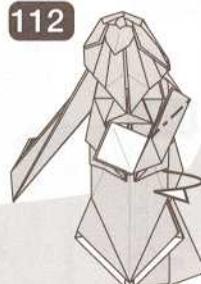
反対側の腕を段折り

113



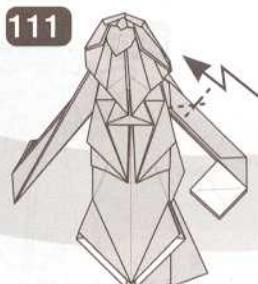
本を開く

112



腕を手前に持ち上げながら
丸く折る(あまりきちんと
折らない)

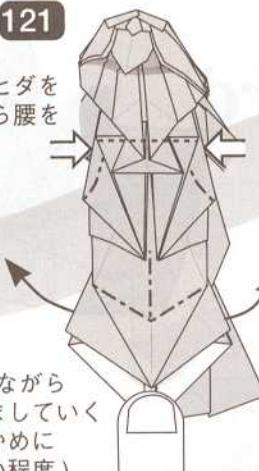
111



腕を段折り

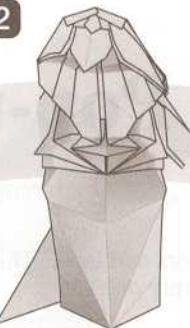
121

下に隠れているヒダをカーブさせながら腰を成形する

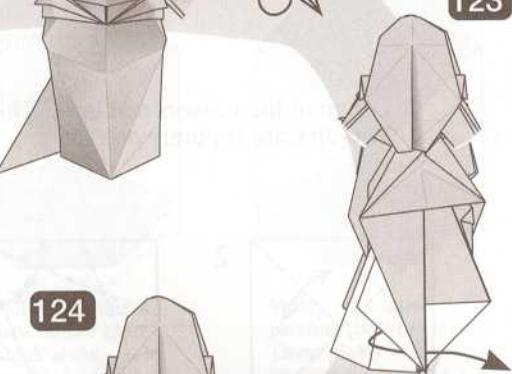


中に指を入れながらスカートを膨らましていく
折りは柔らかめに(線をつない程度)

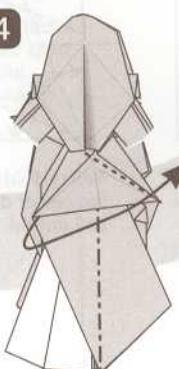
122



123

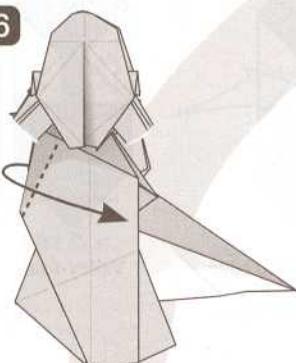


124

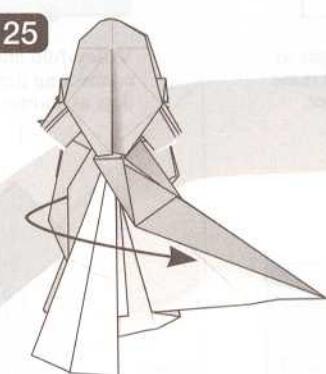


白い部分を中割折り

125

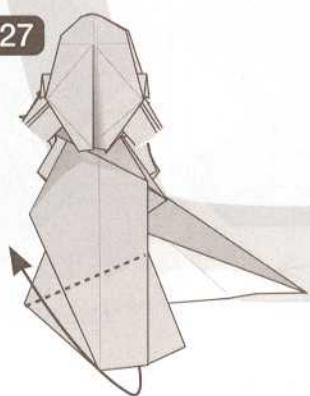


引き寄せ折り

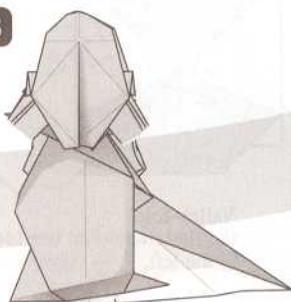


ご参考までに ... (5) /
スカートの仕上げ(膨らまし方、紙の重なった部分の処理など)は省略しています。
力尽きた、というのが本音ですが、私自身、未だ同じ物を折ったことが無いのです。
試行錯誤して自分の好みを探してみてください。

127



128



スカートを膨らませながら形を整える

129

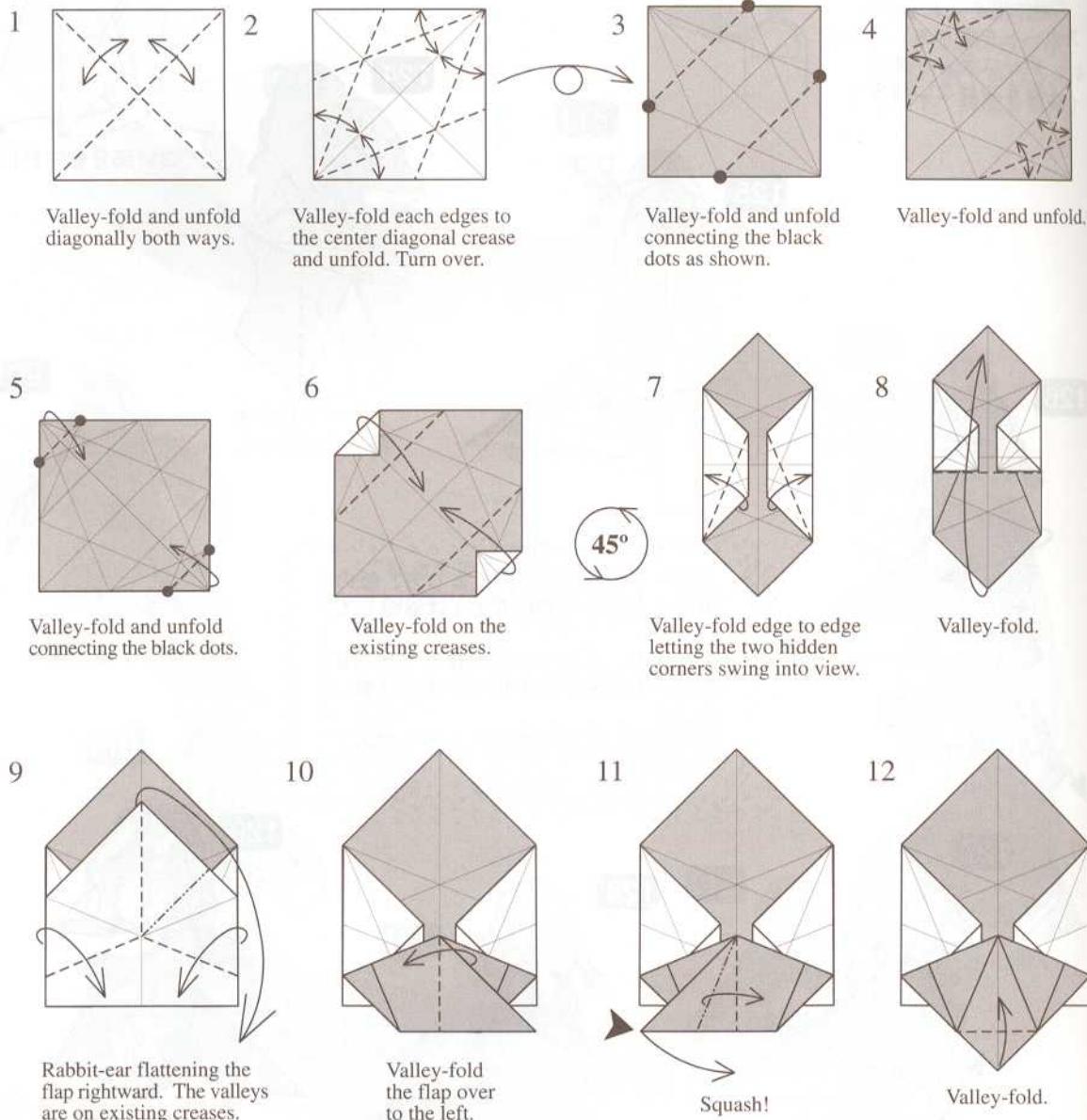
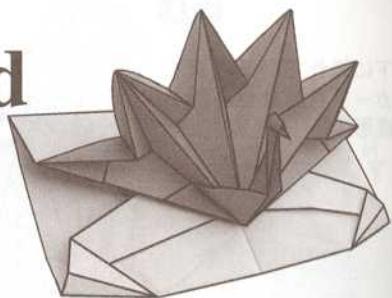


できあがり

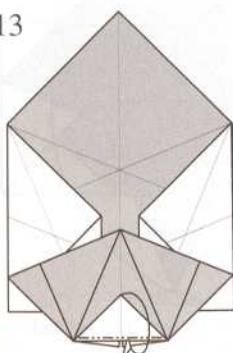
Peacock Pop-up Card

by Jeremy Shafer ©2001

Let go of the scissors and tape. This Peacock Pop-up Card is purely origami.

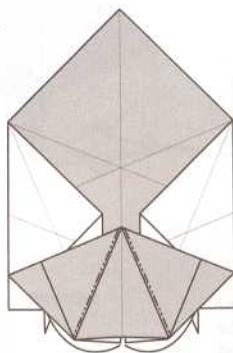


13



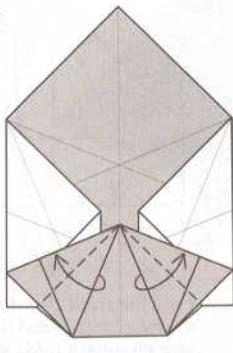
Unfold the flap
and insert it into
the pocket.

14



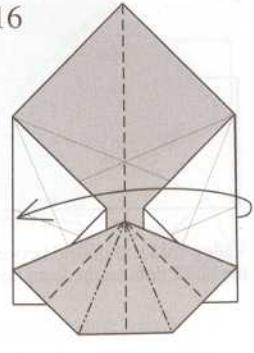
Mountain-fold,
swinging the two
hidden flaps apart.

15



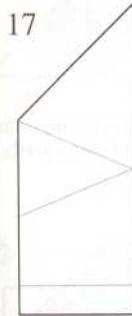
Valley-fold the
flaps further apart.
Think about
Jacob's Ladder.

16



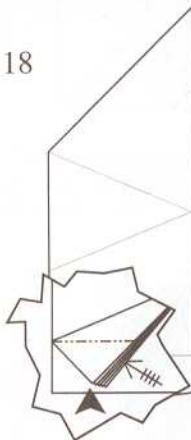
Valley-fold in half
pleating the front layer.
These pleats will
become the peacock's
tail feathers.

17



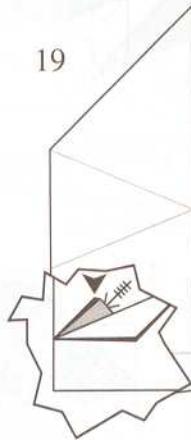
Like this.

18



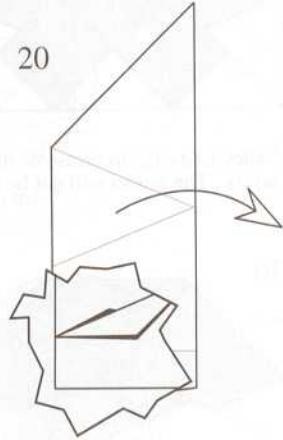
Tear-away view.
Reverse-fold the central
five points, starting with
the middle point. The
folds are horizontal.

19



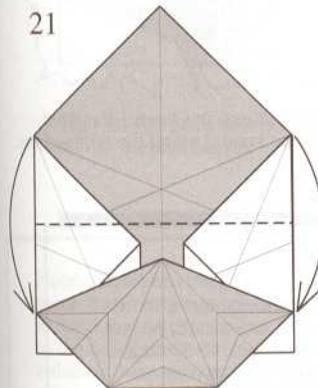
Reverse-fold the
five flaps back
the other way.

20



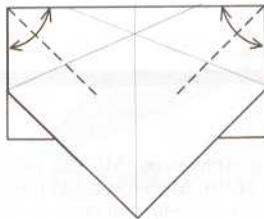
Open the card and
flatten the tail feathers
bringing the model
back to how it looked
in step 16

21



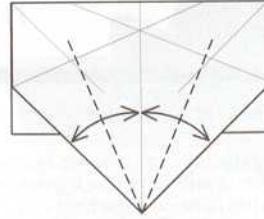
Valley-fold.

22

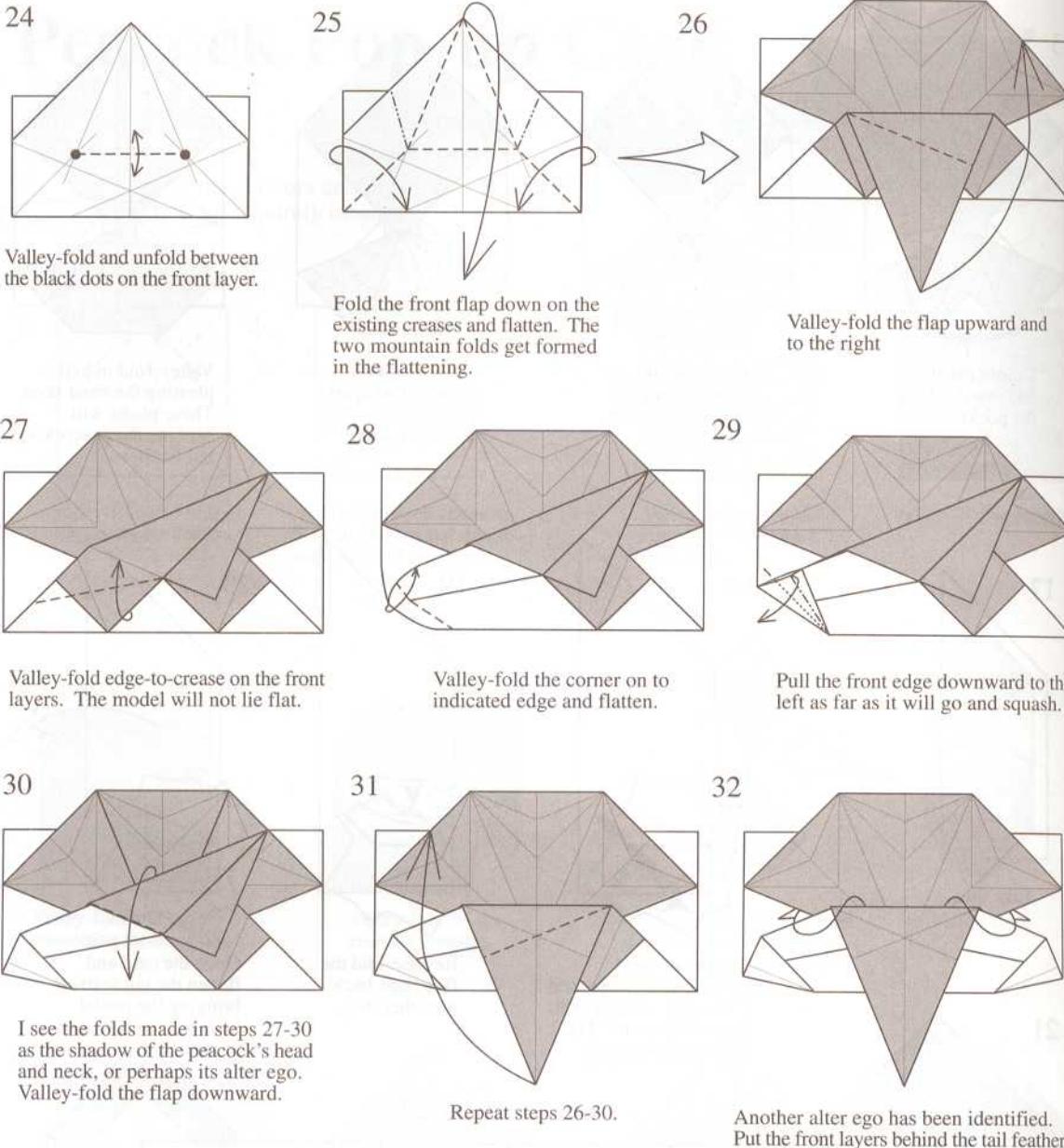


Valley-fold and unfold
on the front layer.

23

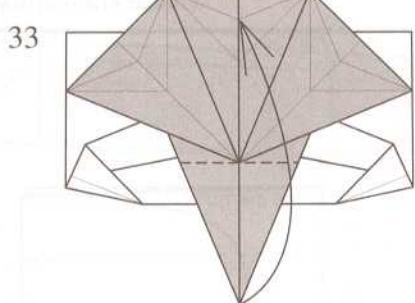


Valley-fold and unfold on the front layer.
These creases should extend at least to
the creases made in the previous step.
Rotate the model 180°.



Thoughts Behind the Folds.

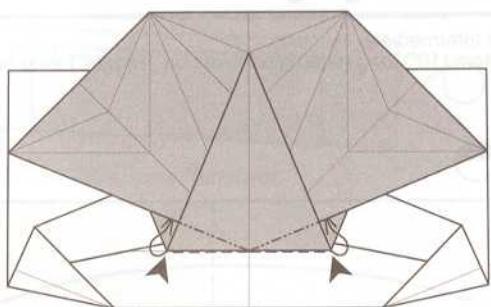
Folding origami pop-up cards has been an ongoing exploration. My idea is that if you can incorporate a model into a pop-up, it will have much more appeal and utility. Sure you could just paste a model into a card, but we origami purists must do it the hard way. This particular pop-up of a peacock has undergone extensive evolution. The original version was quite rough but nevertheless I decided to teach it at the OrigamiUSA Convention 2000 on the assumption that I would be able to refine it in time. But it was much harder than I had anticipated and I found myself banging my head on the problem all the way to New York and even while teaching the class itself, which, just my luck, was soldout. I told everyone I would find a nicer version, diagram it and put it in BARF. So now, more than a year later, here it is.



33

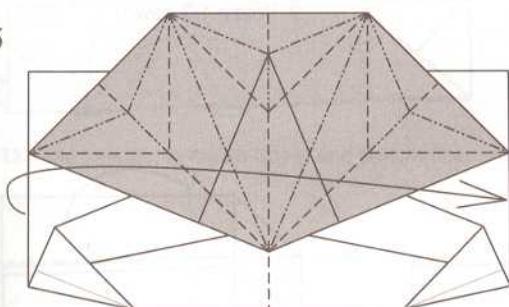
Valley-fold the flap upward.

34



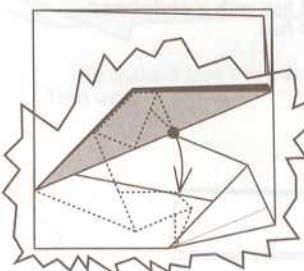
Reverse-fold inserting the paper into the pockets.

35



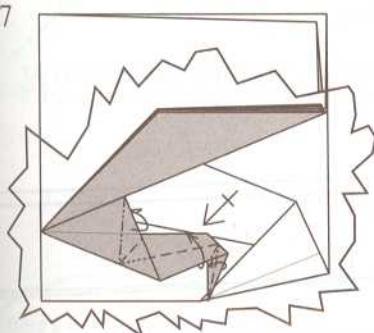
Fold the card in half, refolding the tail feathers as they were in step 20, but this time make the folds go through the top flap too as if it were part of the same layer.

36



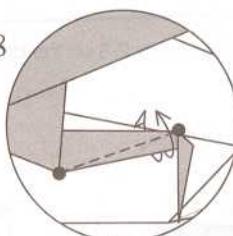
Cut-away view. Pull the peacock's beak downward.

37



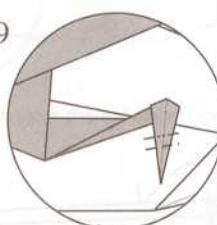
Narrow the neck with swivel folds. Repeat behind.

38



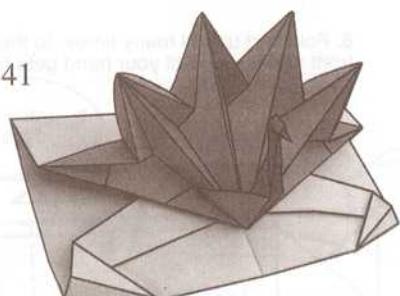
Outside-reverse-fold the neck. This fold extends between black dots on both sides. Let the folds on the head open and redefine themselves.

39



Crimp to form the beak.

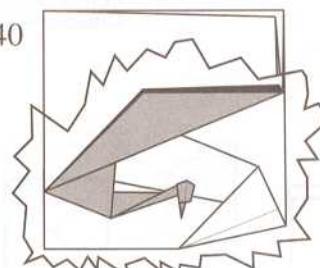
41



The Peacock is open, single, available, and looking to impress some hot peachicks.

Note: There are many much more intricate pleat patterns that can be applied to the tail feathers to enhance their appearance.

40



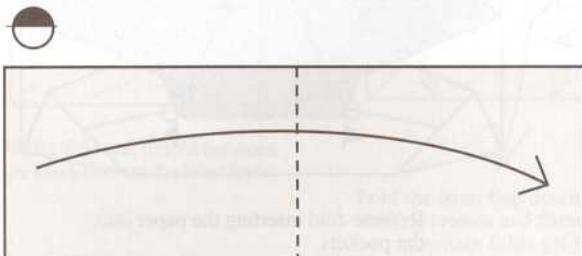
The Peacock Card is complete. Open it and so the peacock can strut its stuff.

The Singing Fish

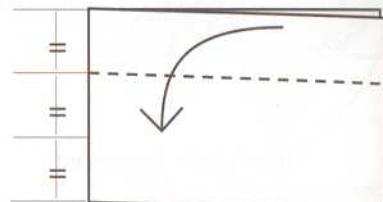
© Gilad Aharoni (Israel) 2002

Low Intermediate

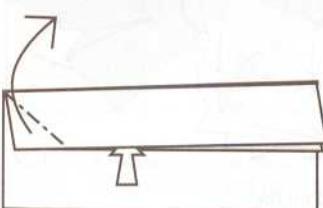
A 24cm (10") long rectangle makes an 11cm (4") long model.



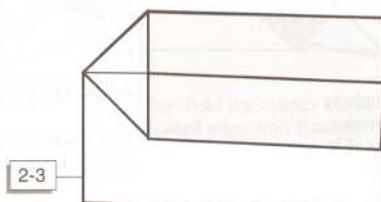
1. Start with a rectangle - approx 1X3, a \$ bill will work nicely. Colored side up for a colored fish with a white head. Valley fold in half.



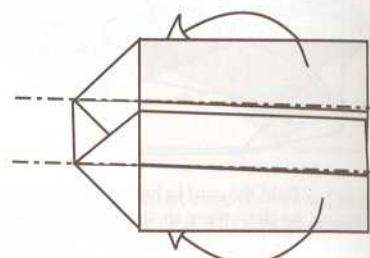
2. Fold a 1/3 down.



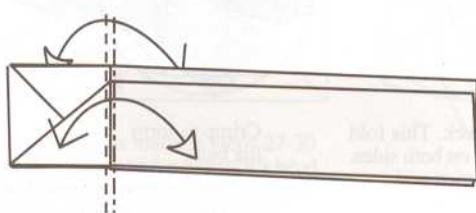
3. Squash fold.



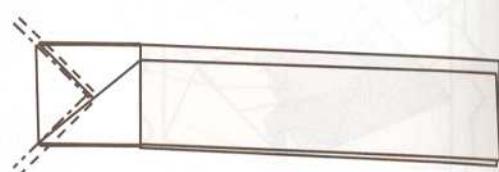
4. Repeat steps 2-3 on the bottom.



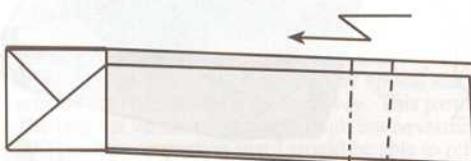
5. Mountain fold top and bottom.



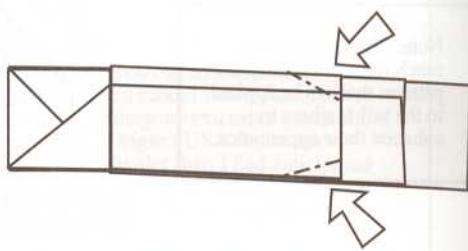
6. Fold and unfold many times, to the front and back, until your hand gets tired.



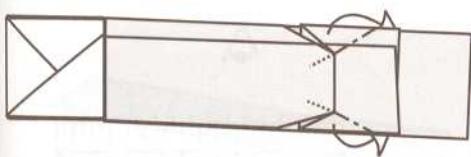
7. Fold and unfold many times, to the front and back, until your hand starts to really hurt. Crease very firmly.



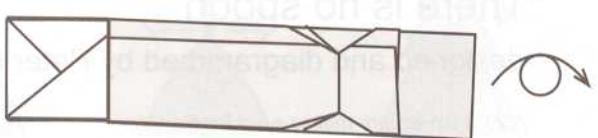
8. Pleat top layer only (no landmarks).



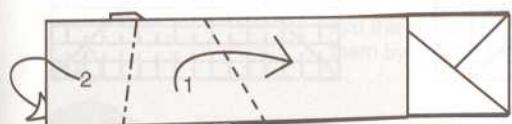
9. Inside reverse fold the corners.



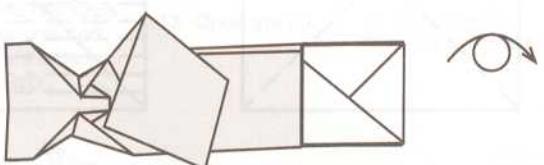
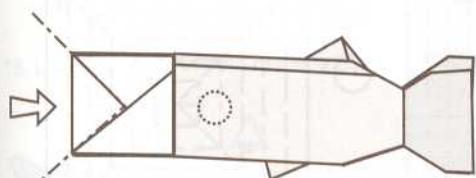
10. Mountain fold corners behind.



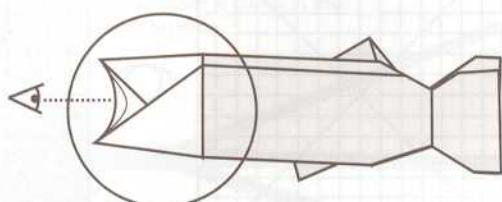
11. The tail is done. Turn over.



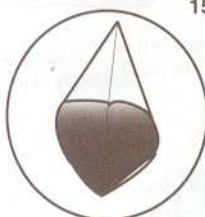
12. Fold to taste, to create upper and bottom fins.

To make it look like this.
Turn over.

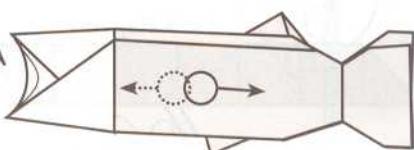
14. Gently push in the mouth - to make it 3-D. It helps if you place your finger inside.



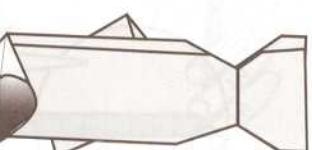
15. Views from the side and from the front.



Here's a little song I wrote;
you might want to sing it
note-for-note...

16. Place your thumb in the front, and
your finger in the back, and slide in opposite
directions...

Don't worry, Be happy!



17. To make the fish sing!

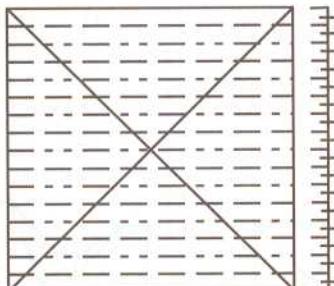
"There is no spoon"

designed and diagrammed by Peter Farina

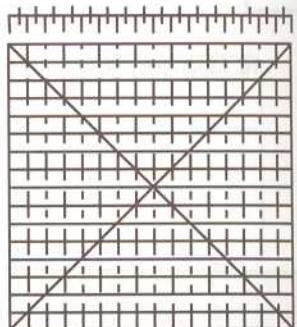
A 21.3 cm square makes a ~ 17 cm spoon.



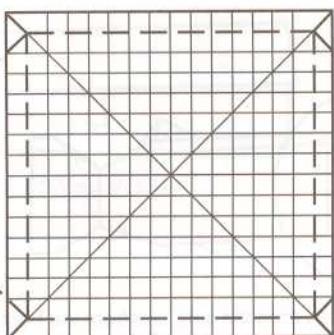
1. For the best results, use foil paper. Start with the color side down. Fold diagonals.



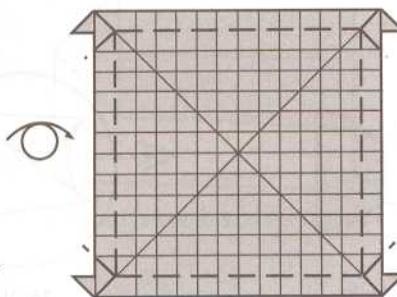
2. Divide into 1/16ths horizontally.



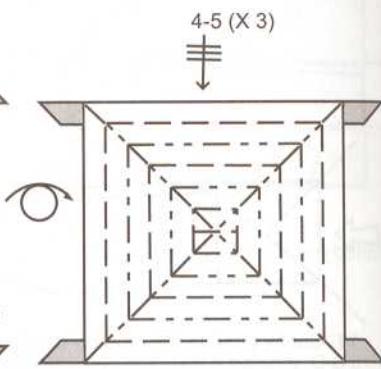
3. Divide into 1/16ths vertically.



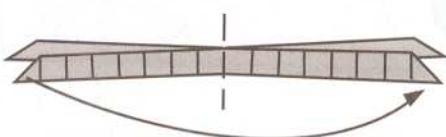
4. Collapse on existing creases. Turn over.



5. Collapse on existing creases. Turn over.



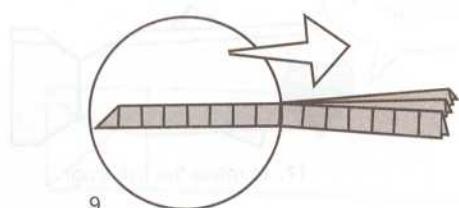
6. Repeat steps 4-5 three times.



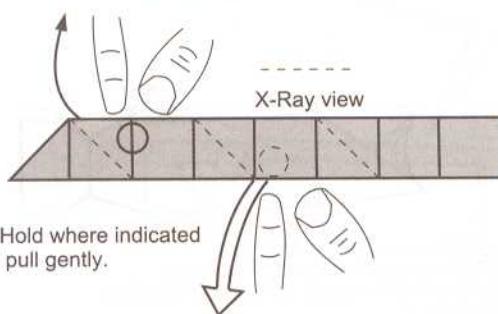
7. Swing one flap over.



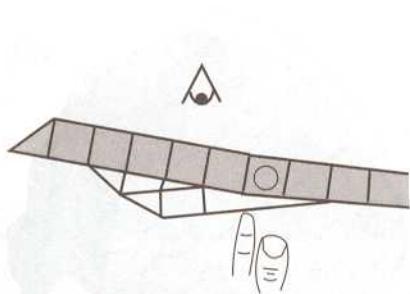
8. Reverse fold. Repeat on the two flaps behind.



9.



10. Hold where indicated and pull gently.



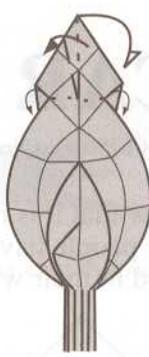
11. Pinch where indicated.



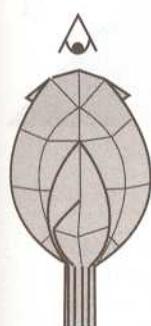
12. Round the spoon. There are two flaps in the center. Spread the larger one and fold the smaller one to the side. Flatten them by pressing with your thumb.



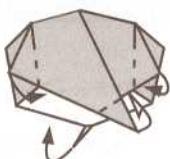
13. Open the tip.



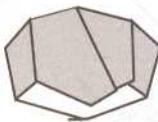
14. Fold the tip down as indicated.



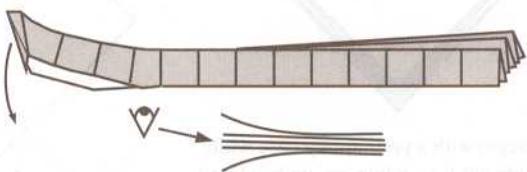
15. Like this.



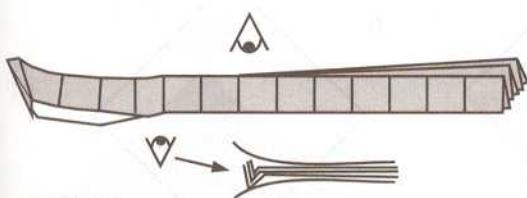
16. Reverse fold the corners. Tuck the tip under. Flatten the bottom of the spoon.



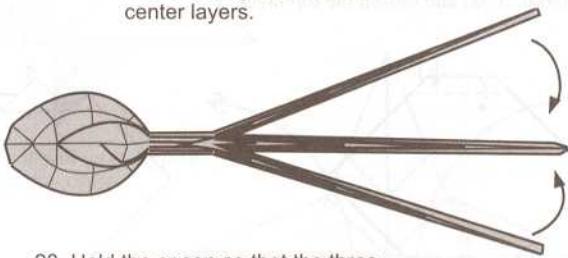
17. Like this.



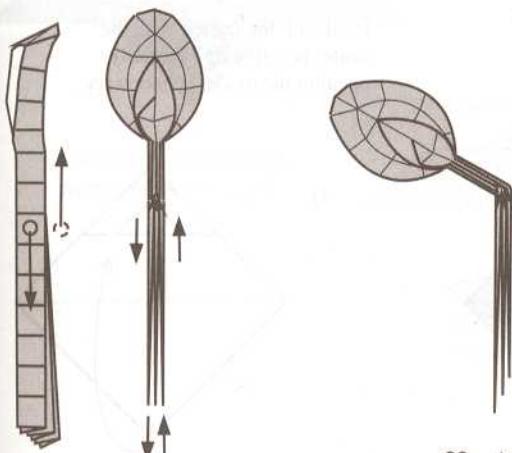
18. Bend the spoon down incorporating a crimp in the center layers.



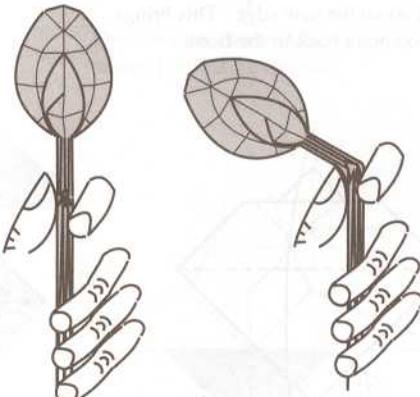
19. Like this.



20. Hold the spoon so that the three handle flaps are pressed together.



21. Simultaneously slide one handle flap down with your thumb and the opposite flap up with your index finger...



22. ...to make the spoon bend.

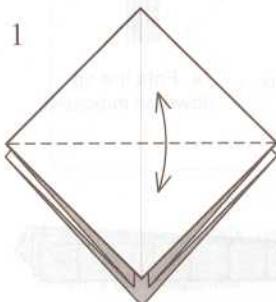
"Do not try and bend the spoon. That's impossible. Instead, only try to realize the truth . . . There is no spoon . . . Then you'll see that it is not the spoon that bends. It is only yourself."

-- *The Matrix*

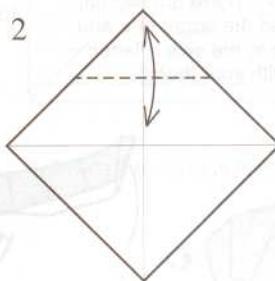
CAR (VW BUG)

By: Charles Esseltine (2001) Edited by: Jeremy Shafer (2002)

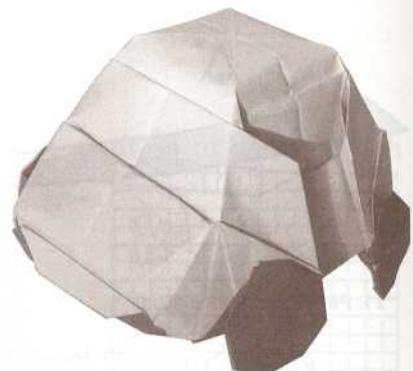
I know that it is not an exact likeness. But so many people have called this a Bug, that I have bowed to their will.



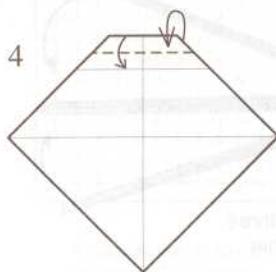
Begin with a preliminary base white side out for a white car, with colored wheels. I think foil is best for this model. But it can be done from any material. Fold and unfold the top layer.



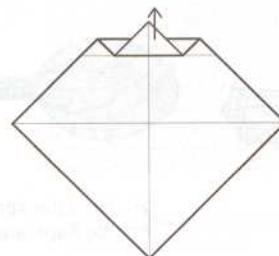
Fold the top to meet the center. Then unfold.



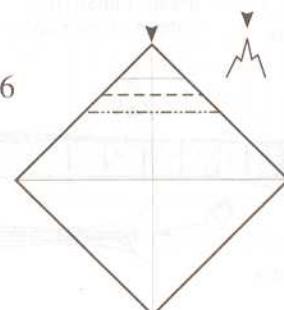
Fold the top point behind to the nearest crease.



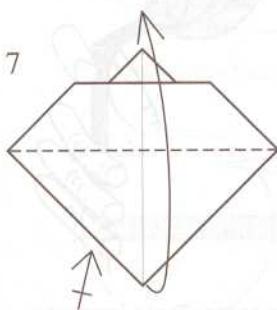
Fold down the new edge. This brings the top point back to the front.



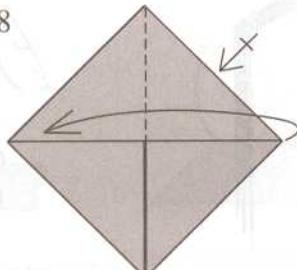
Unfold the layers.



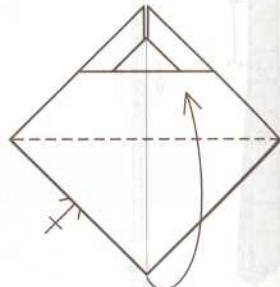
Pleat sink the center, with the center pointing up. Partially opening the model is necessary.



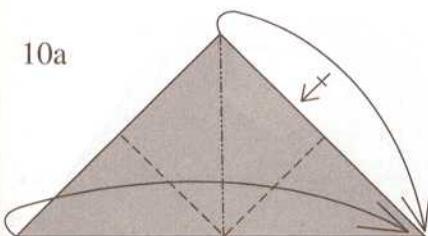
Fold up the front flap.
Repeat behind.



Open up the side, and refold the model so that the white side is on the outside.

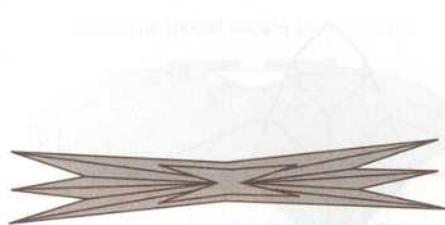


Fold up the remaining sides.

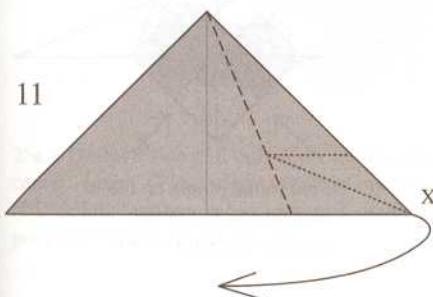


10a

10b

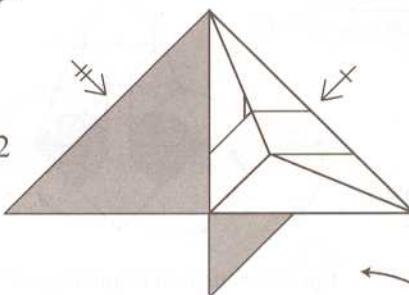


On the front layer, fold the top point to the right corner. Then fold the left point to the right corner.

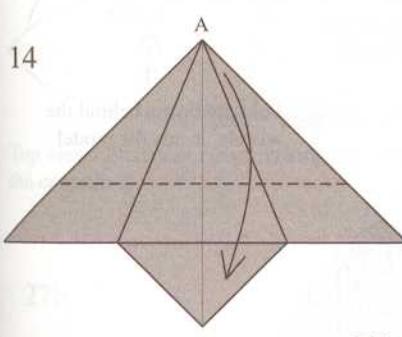


11

12



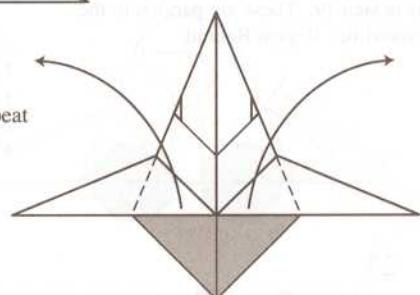
Fold the top 3 layers to the centerline. This will pull up one layer from point X. Fold it down to meet the bottom line.



14

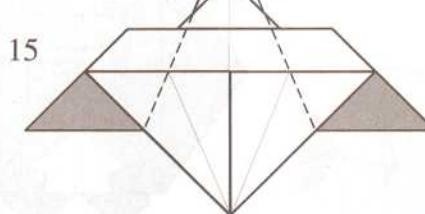
This is how it will look. Repeat on the other three sides.

13

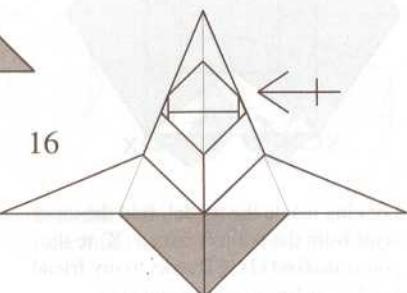


Open out the two middle sections without unfolding the ends.

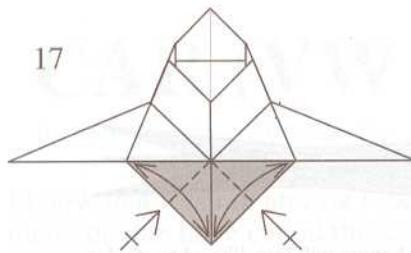
Fold the first layer down from point A to point B.



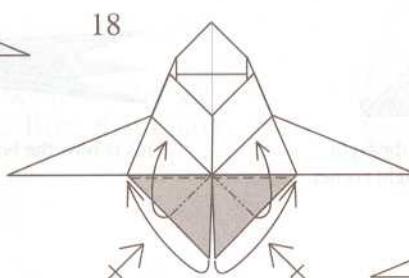
Fold the sections back along the existing lines.



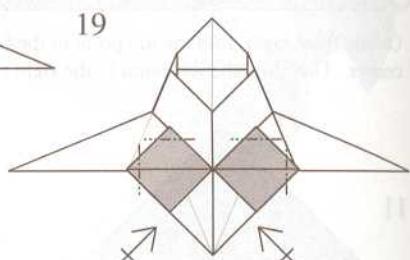
Repeat steps 13-15 on the back.



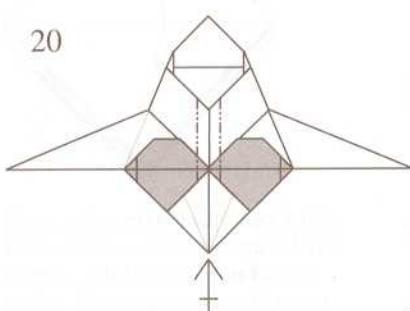
Fold and unfold the bottom flaps on both sides.



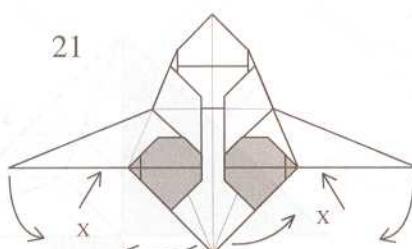
Squash fold the bottom sections. Repeat behind.



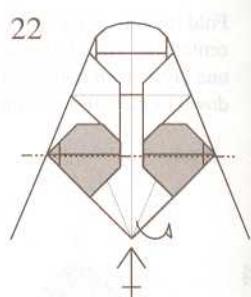
Fold in the points on the outside and top of the wheels. Repeat behind.



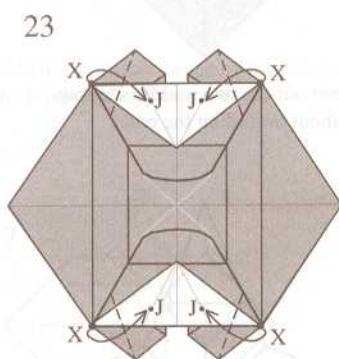
Fold the edges inward the same distance as in step 19. These are parallel to the centerline. Repeat Behind.



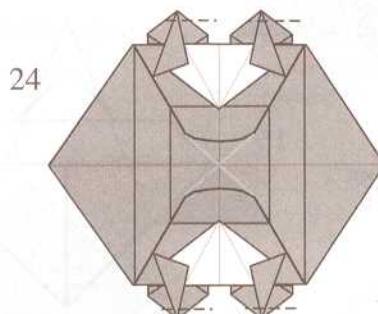
Open the bottom and form the roof. At point (X) open the layers and push upward on the interior layer to form the hood and trunk. Pull down the left and right points.



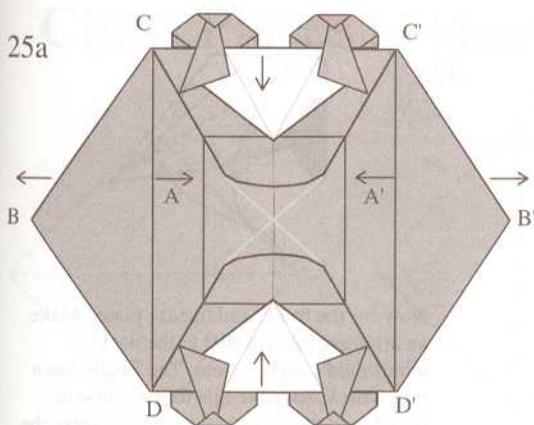
Fold the layers behind the wheels, inside the model.



Looking inside the model, fold the inner layer from the points marked (X) to the points marked (J). [Thanks to my friend Joe Power for locating point (J).]

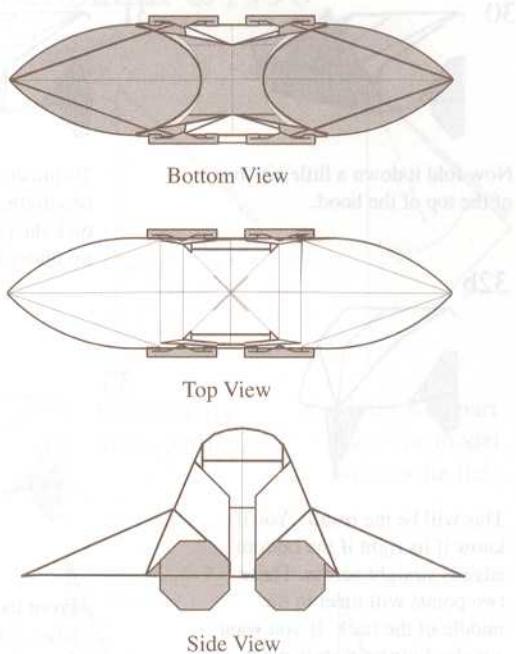


Fold in the bottoms of the wheels.
Note: The larger the model, the more you can round the wheels.



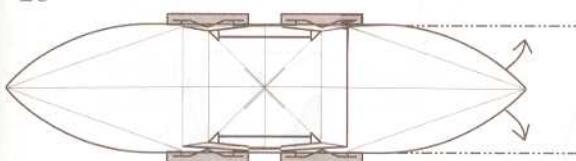
25a.) On each side pull only layer (A & A') in towards the center. Line CD of layer (A) will arc inward, and the sides (CC' & DD') will move towards each other. The outer points (B & B') will move apart.

25b



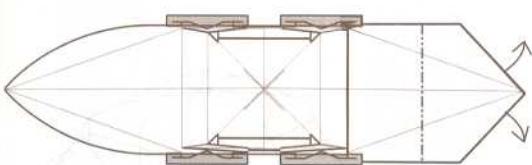
Now for the tough part! Choosing which side will be the front!

26



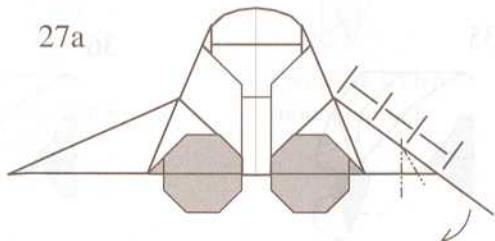
Top view. Flatten one end, making the creases parallel to the centerline.

27b



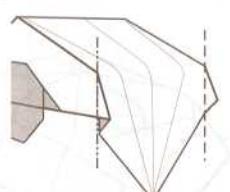
Same step, different view.

27a



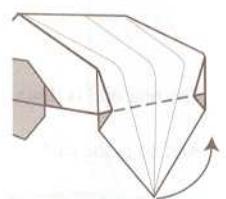
This looks harder than it is. About 2/3 of the way down the edge of the hood, make a soft crease. Pinch the corners so that the front points straight down.

28

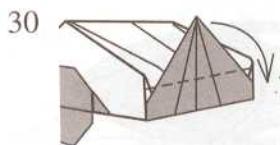


Fold the tips inward, so that they are flat against the front.

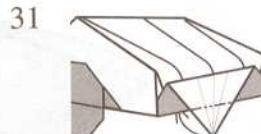
29



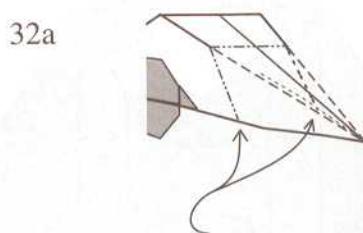
Fold the bottom up as far as it will go.



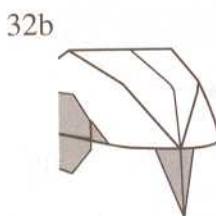
Now fold it down a little bit shy of the top of the hood.



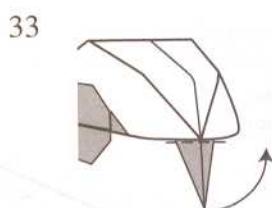
To finish the headlights, just tuck the remaining tip under the edge.



Now for the trunk, and license plate. Make an arbitrary fold parallel to the back windshield's edge. (Note: The Beetle has a round back, so make this fold as close as possible to the windshield.) And reverse the creases as indicated. A soft crease will form on each side of the trunk.

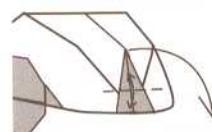


This will be the result. You'll know if its right if the bottom edge is straight across. These two points will meet in the middle of the back. If you want a wider European style plate, leave a gap between the points.

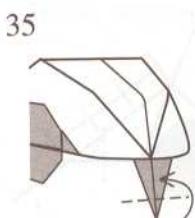


From the bottom edge, fold the point up as far as it will go.

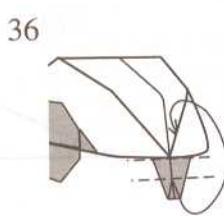
34



Using the edges as a guide, fold, and unfold a line where they meet. Bring the point back down.

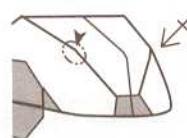


Fold the tip to the marker fold.



Tuck the flap inside the edges to lock the trunk.

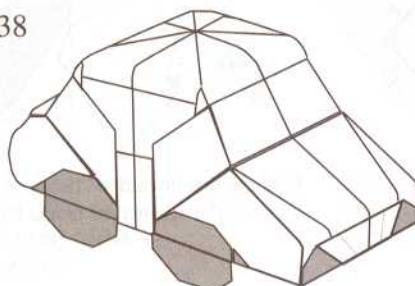
37



Now that the trunk is formed, we can add the taillights. Dimple sink the points to taste.

O.K. We've got the trunk locked. Now We've got to figure out how to unlock the doors!

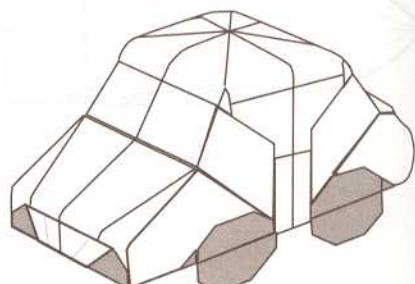
38



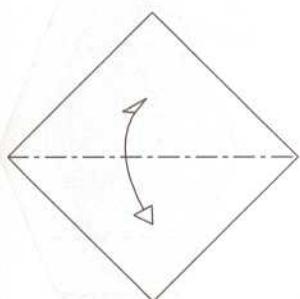
The rear end is done.

And so is the car!

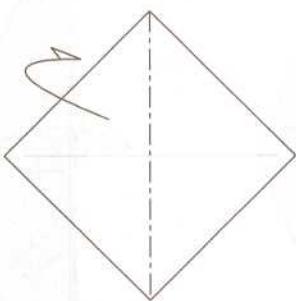
Drive Safely!



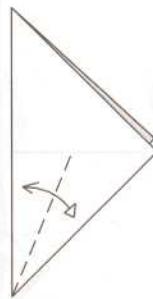
Chess Pieces by Marc Kirschenbaum ©1996



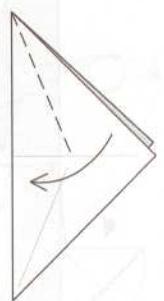
1. Precrease with a mountain fold.



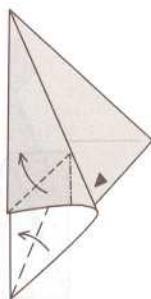
2. Mountain fold in half.



3. Precrease the lower portion.



4. Valley fold part way. The model will not lie flat.



5. Squash fold to flatten.



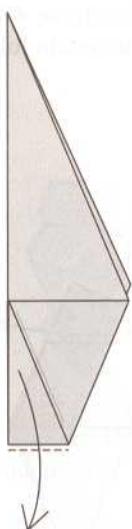
6. Repeat steps 3-5 behind.



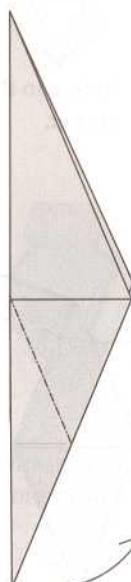
7. Valley to the center.



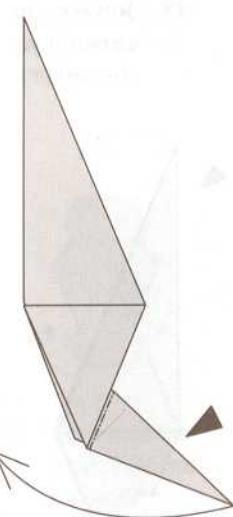
8. Precrease with a mountain fold.



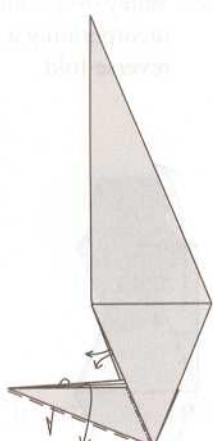
9. Unfold.



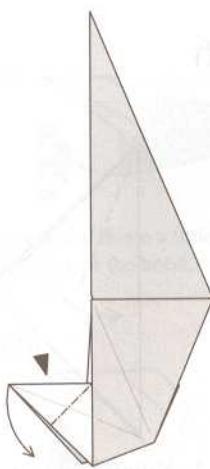
10. Reverse fold.



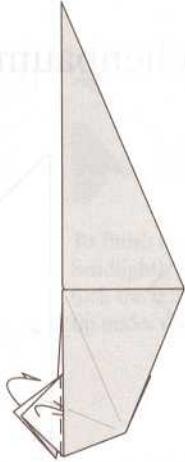
11. Reverse fold again.



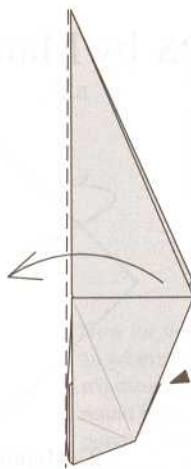
12. Pull out a single layer at each side.



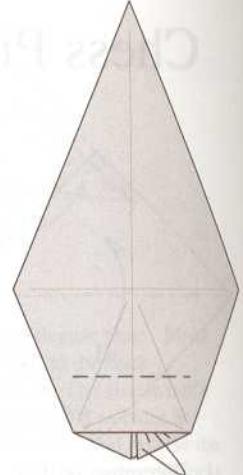
13. Reverse fold.



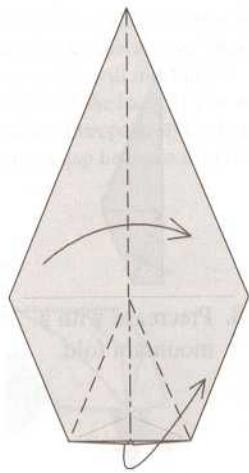
14. Tuck the flaps under the outer layers.



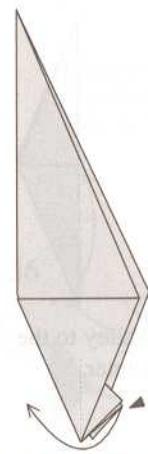
15. Open out, allowing the center flap to squash flat.



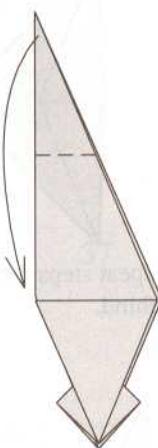
16. Valley into the pocket.



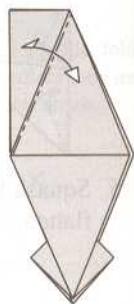
17. Valley over, while incorporating a reverse fold.



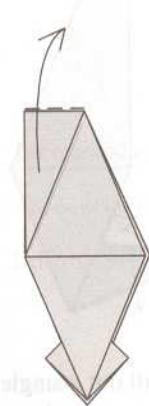
18. Reverse the center layer through.



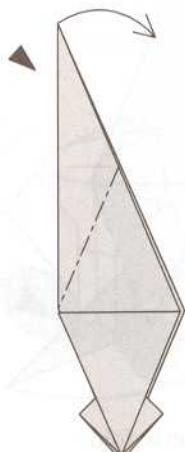
19. Valley to the corner.



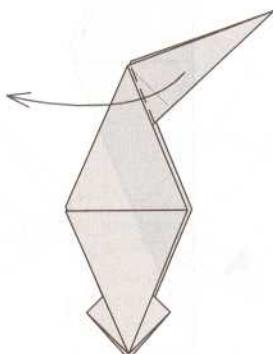
20. Precrease with a mountain fold.



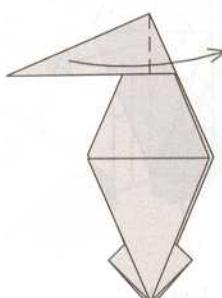
21. Unfold.



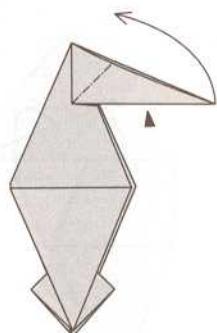
22. Reverse fold.



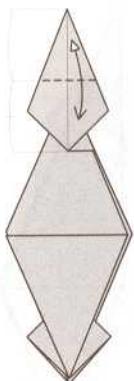
23. Valley over.



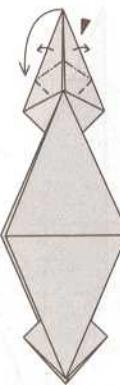
24. Valley again.



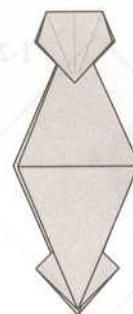
25. Squash fold.



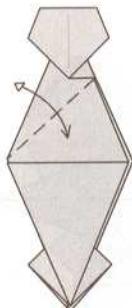
26. Precruse and turn over.



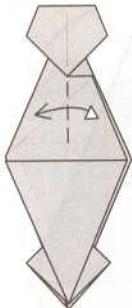
27. Squash fold, so as to make the top look the same on both sides.



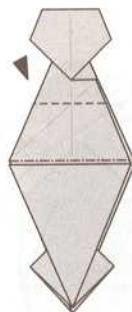
28. Turn over.



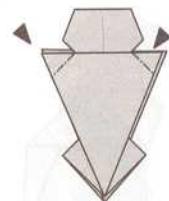
29. Precruse.



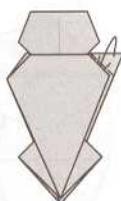
30. Precruse the top section in half.



31. Reverse fold in and out. Note that the valley fold goes through the intersection of creases.



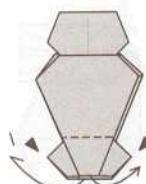
32. Reverse fold the thick corner at the left, and one corner at the right.



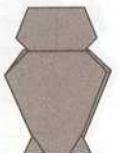
33. Tuck the flap into the pocket.



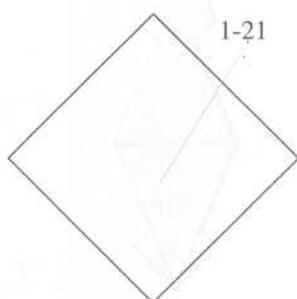
34. Mountain fold the corners in.



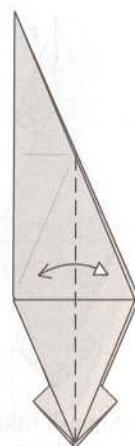
35. Open out the base. You can either crease sharply or leave it rounded.



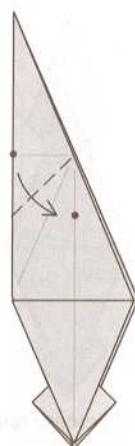
36. Completed Pawn.



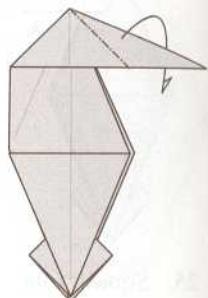
37. Begin with a same sized square for the castle. Repeat steps 1-21.



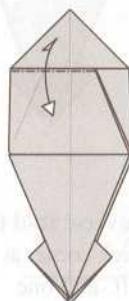
38. Precrease lightly. Repeat behind.



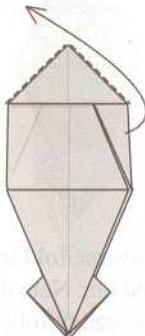
39. Valley such that the creases meet.



40. Mountain fold.



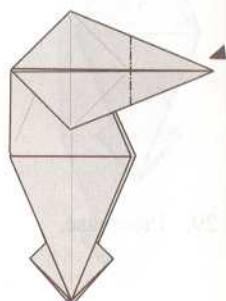
41. Precrease with a mountain fold.



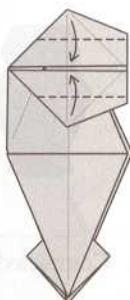
42. Open out the flap.



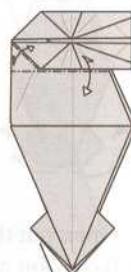
43. Squash fold.



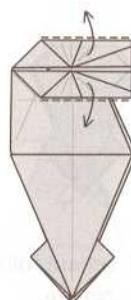
44. Sink the tip.



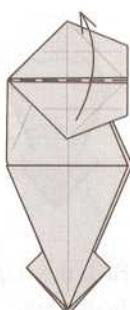
45. Valley the corners to the center.



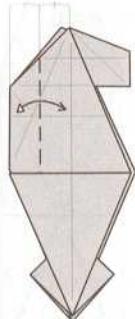
46. Precrease with mountain folds.



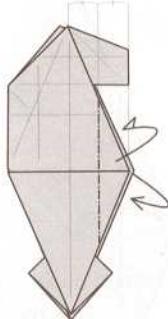
47. Open out.



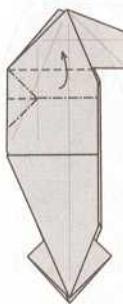
48. Swing up.



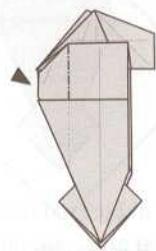
49. Precrease.



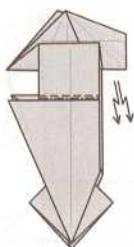
50. Mountain fold the sides in halfway.



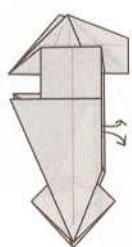
51. Crimp upwards, while pushing in the side.



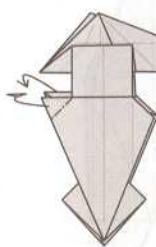
52. Sink halfway. Part of the sink is hidden.



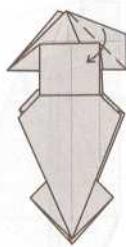
53. Form a very tiny crimp.



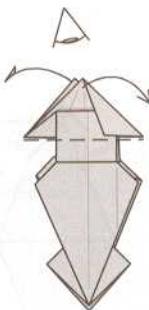
54. Pull out a layer from each side, allowing the upper edge to taper.



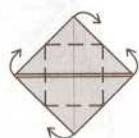
55. Mountain fold the two corner to match the right side.



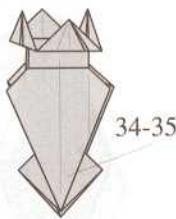
56. Valley over at each side to lock.



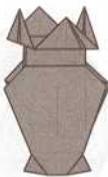
57. Open out the sides at a angle.



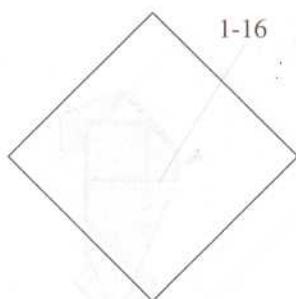
58. View from above. Valley each corner up at a 90° angle.



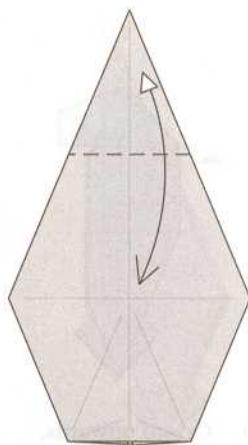
59. Repeat steps 34-35.



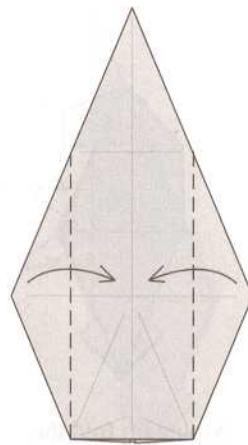
60. Completed Castle.



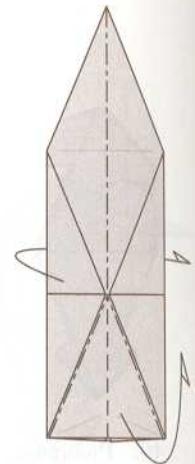
61. Begin with a same sized square for the knight. Repeat steps 1-16.



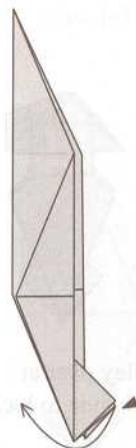
62. Precrease.



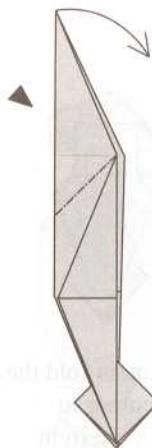
63. Valley to the center. Do not crease sharply.



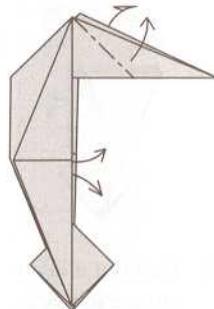
64. Mountain fold in half, while incorporating a reverse fold.



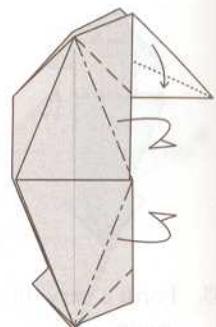
65. Reverse the center layer through.



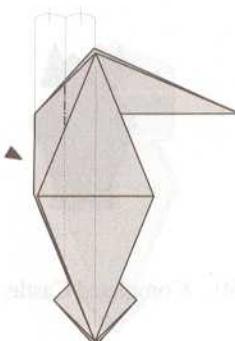
66. Reverse fold.



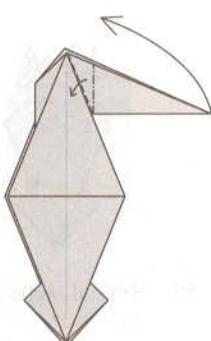
67. Pull out a layer from each side. Do not completely flatten.



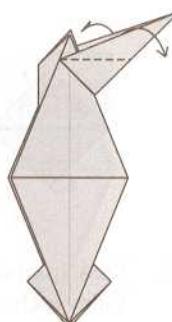
68. Swivel in all of the sides, and flatten.



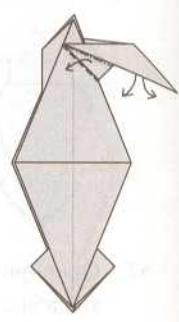
69. Closed sink the center flap halfway.



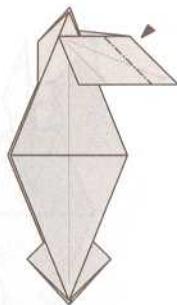
70. Crimp upwards.



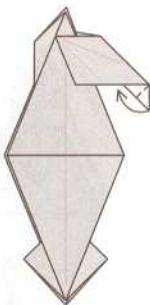
71. Outside reverse fold.



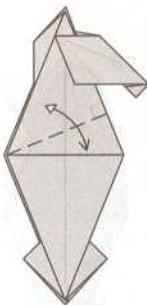
72. Pull out a single layer from each side as far as possible.



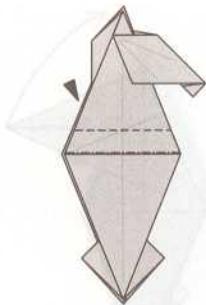
73. Closed reverse fold.



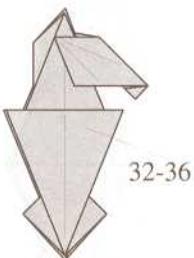
74. Outside reverse fold.



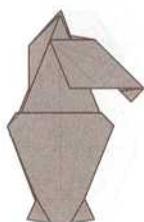
75. Precrease.



76. Reverse fold in and out. Note that the valley fold goes through the intersection of creases.



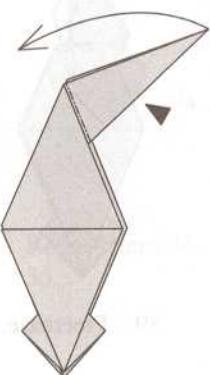
77. Repeat steps 32-36.



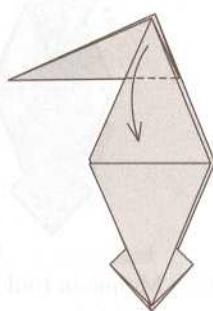
78. Completed Knight.



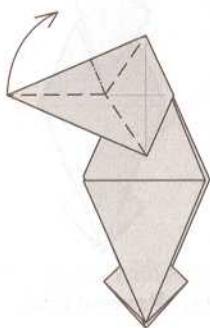
79. Begin with a same sized square for the bishop. Repeat steps 1-22.



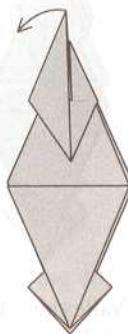
80. Reverse fold.



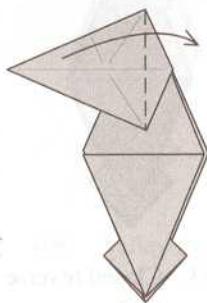
81. Open out.



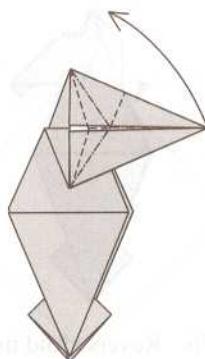
82. Rabbit ear.



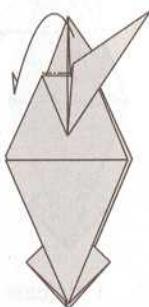
83. Undo the rabbit-ear.



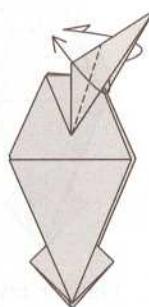
84. Swing over.



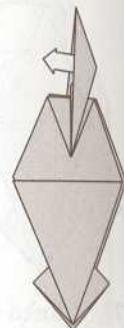
85. Redo the rabbit-ear, while adding additional folds.



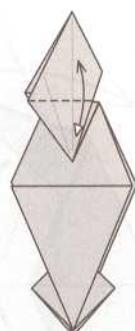
86. Swing back.



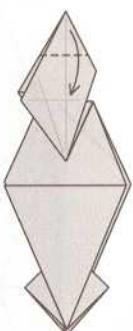
87. Outside reverse fold.



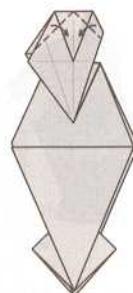
88. Pull out a single layer at each side.



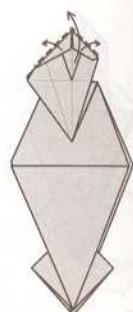
89. Precrease.



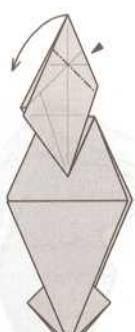
90. Valley to the intersection of creases.



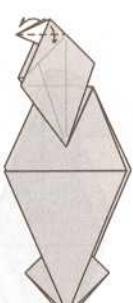
91. Valley to the center.



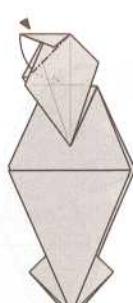
92. Unfold.



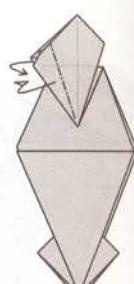
93. Closed reverse fold.



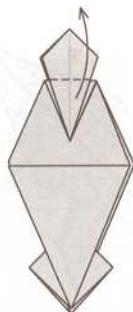
94. Valley down at each side.



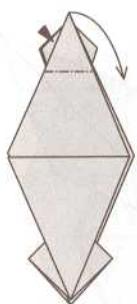
95. Reverse fold.



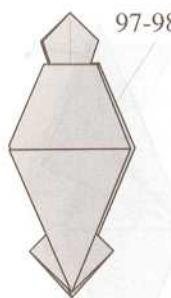
96. Mountain fold at each side.



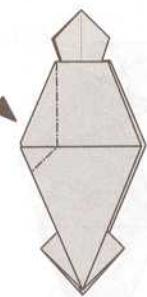
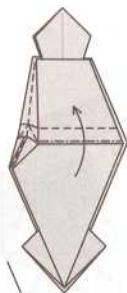
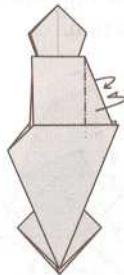
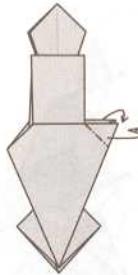
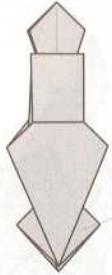
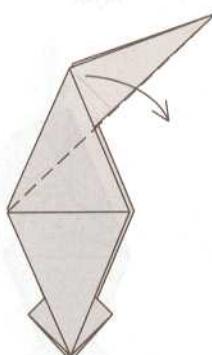
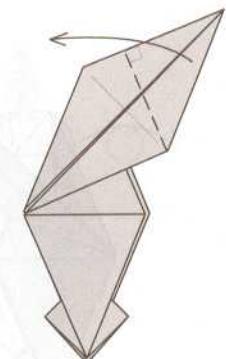
97. Valley up.



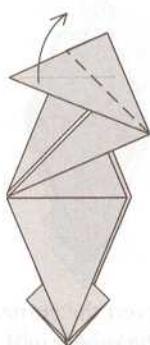
98. Reverse fold.



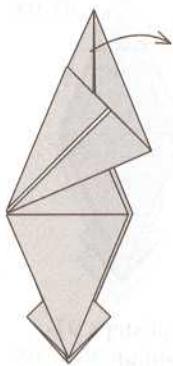
99. Repeat steps 97-98 behind.

100. Invert the corner.
The model will
not lie flat.101. Crimp both sides
to flatten.102. Swivel in both
sides.103. Mountain fold the
two corners.104. Repeat steps 34-
35.105. Completed
Bishop.106. Begin with a same
sized square for
the queen.107. Swing down
lightly.

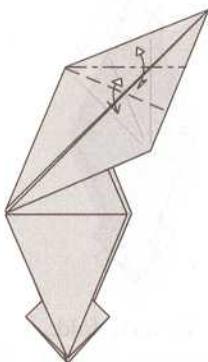
108. Valley over.



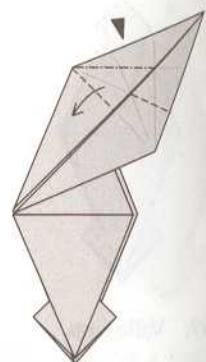
109. Valley up.



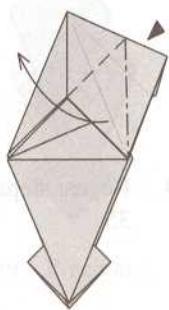
110. Unfold the pleat.



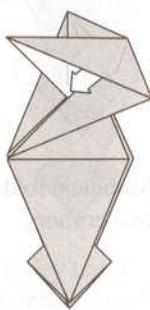
111. Repeat the precreases from steps 108 and 109 in the opposite direction.



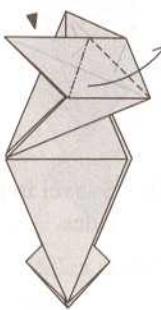
112. Squash fold.



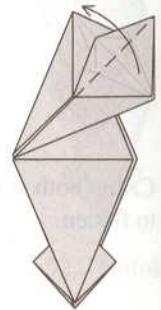
113. Squash again.



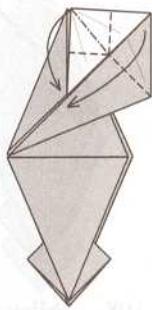
114. Pull out a single layer.



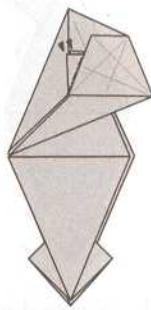
115. Squash fold.



116. Valley up.



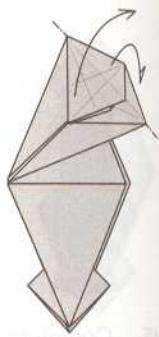
117. Swing the flap down, while incorporating a reverse fold.



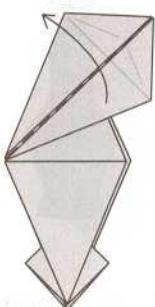
118. Reverse fold twice.



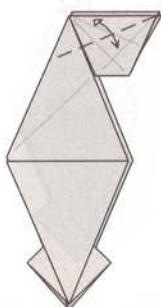
119. Swing the center flap over.



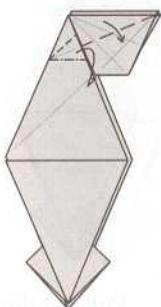
120. Flip the cluster of flaps upwards.



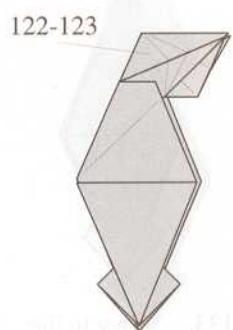
121. Swing up.



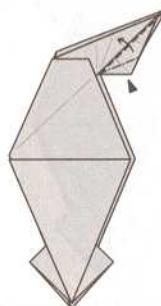
122. Precrease.



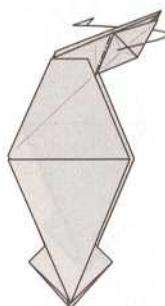
123. Swivel fold.



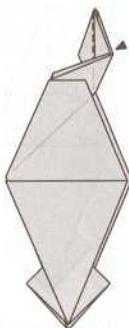
124. Repeat steps 122-123 behind.



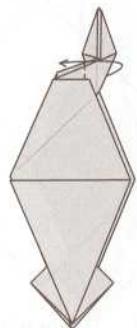
125. Spread squash.



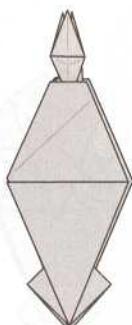
126. Mountain fold.



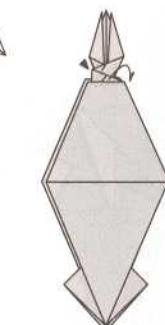
127. Reverse one layer through.



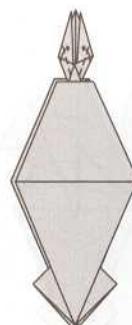
128. Valley, so as to align along the center.



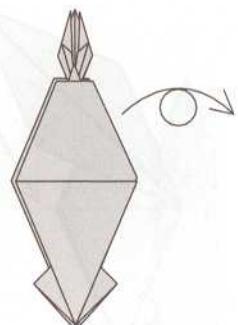
129. Turn over.



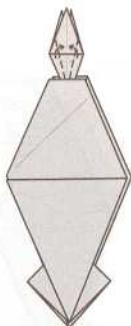
130. Swivel fold the double layer.



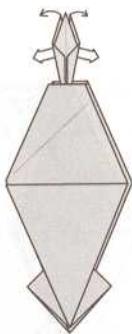
131. Valley the top layers to the center.



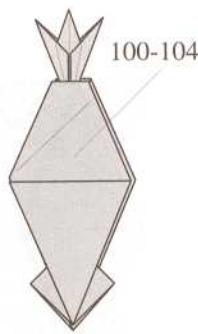
132. Turn over.



133. Valley to the center.



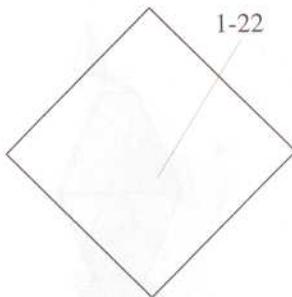
134. Pull out the side flaps.



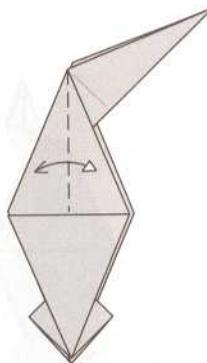
135. Repeat steps 100-104.



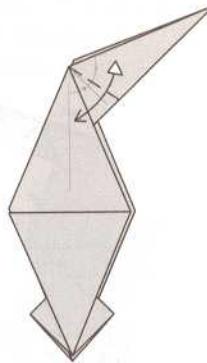
136. Completed Queen.



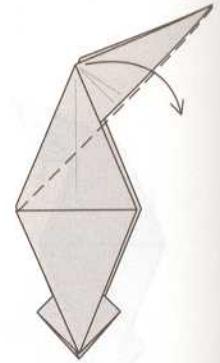
137. Begin with a same sized square for the king. Repeat steps 1-22.



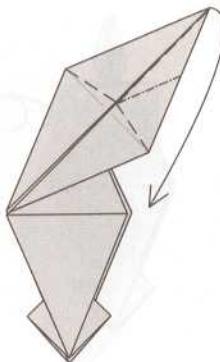
138. Precrease in half lightly.



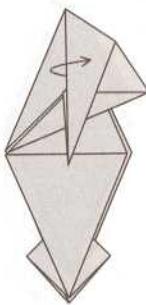
138. Bring the flap along the center and unfold.



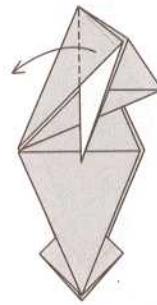
139. Lightly open out the flap.



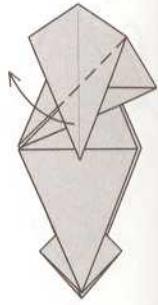
140. Rabbit ear using the existing creases.



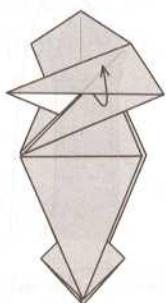
141. Wrap around a single layer.



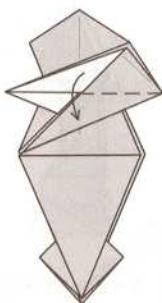
142. Swing over.



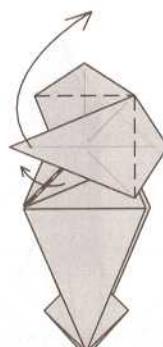
143. Valley up lightly.



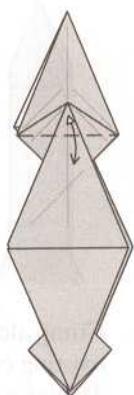
144. Wrap around a single layer.



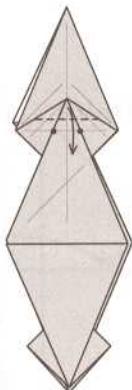
145. Swing down.



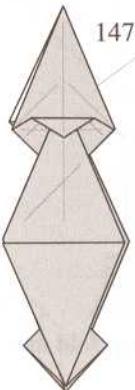
146. Pull the flap up, while collapsing.



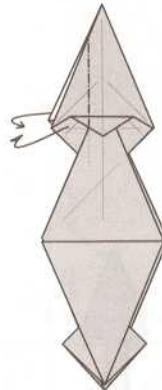
147. Precrease.



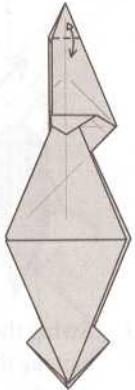
148. Valley, allowing the edges to meet the indicated intersections.



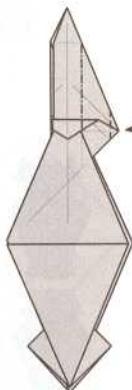
149. Repeat steps 147-148 behind.



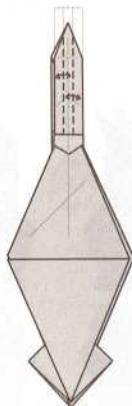
150. Mountain fold the sides.



151. Precrease.



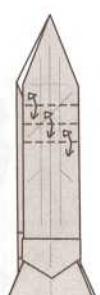
152. Closed sink the corner in and out.



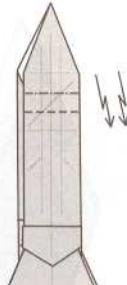
153. Precrease into thirds.



154. Precrease.



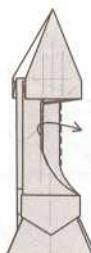
155. Precrease, using the intersection of creases as guides.



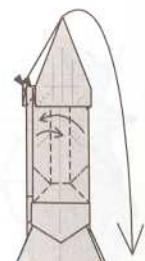
156. Crimp along the existing creases. The inner layers will not be symmetrical.



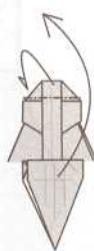
157. Valley over, pulling some paper from inside the crimp.



158. Swing through.



159. Swivel the sides inwards, allowing two reverse folds to form at the right. The flap will swing down.



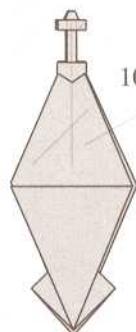
160. Swing the flap up, tucking the excess into the pocket behind.



161. Crimp the tip.



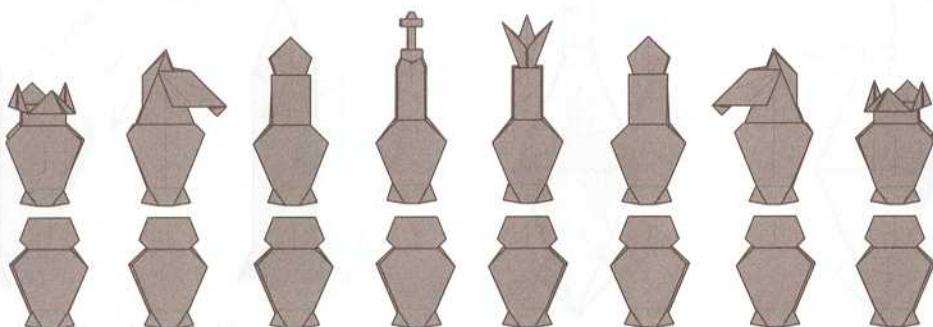
162. Reverse fold the tip.



163. Repeat steps 100-104.



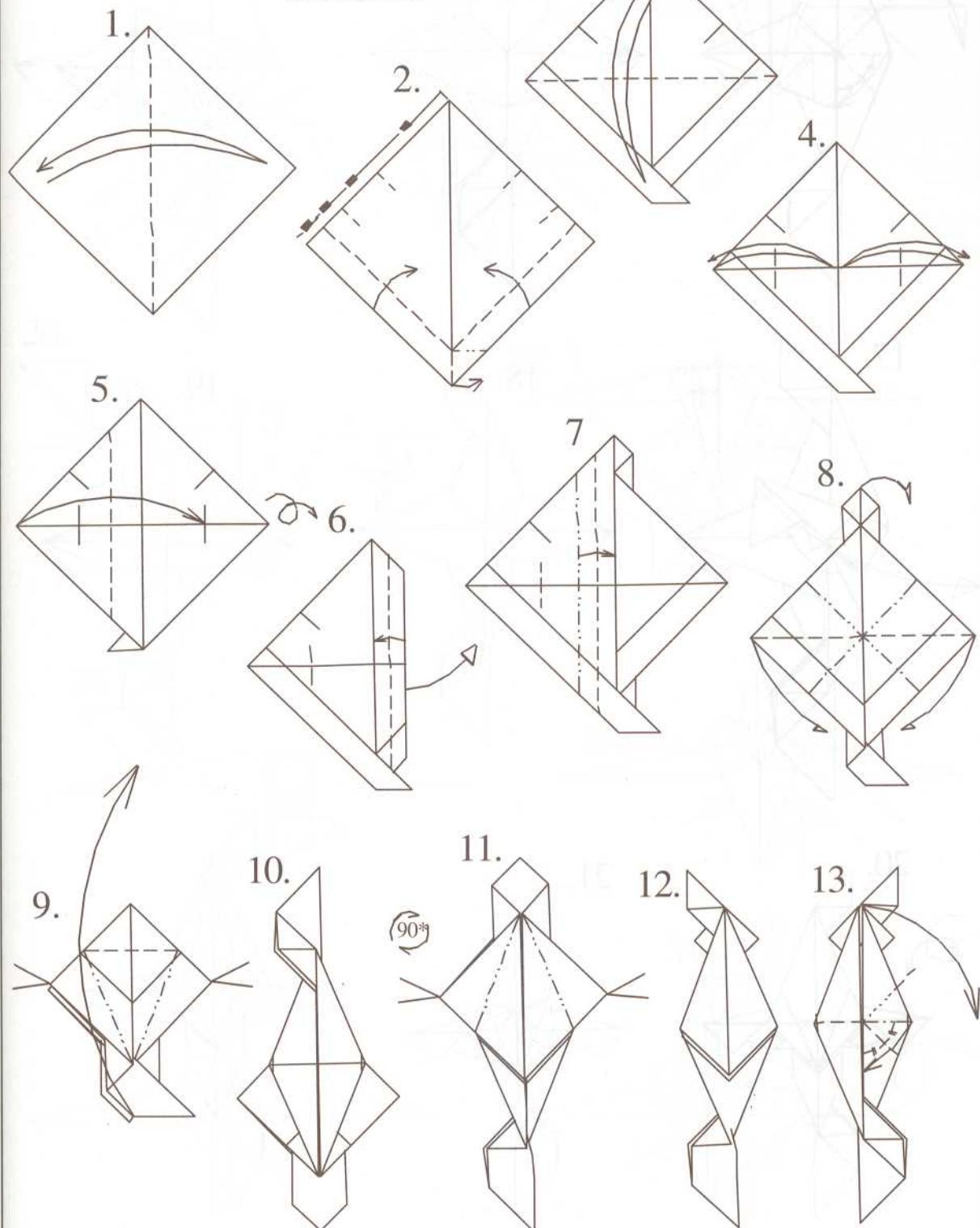
164. Completed King.



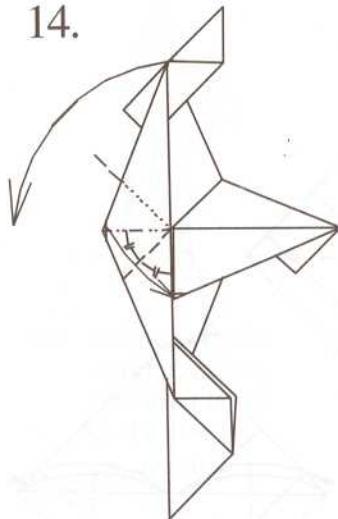
165. Completed Chess Pieces.
©1996 Marc Kirschenbaum

SIRENA

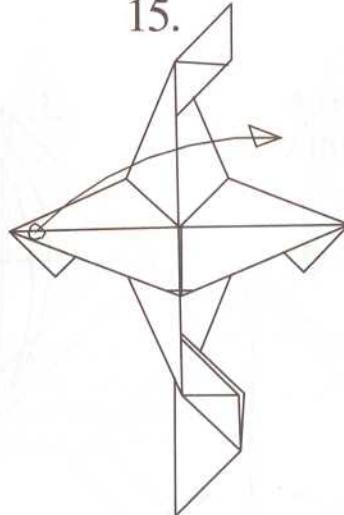
POR: Willyman Reed Cardona A
COLOMBIA



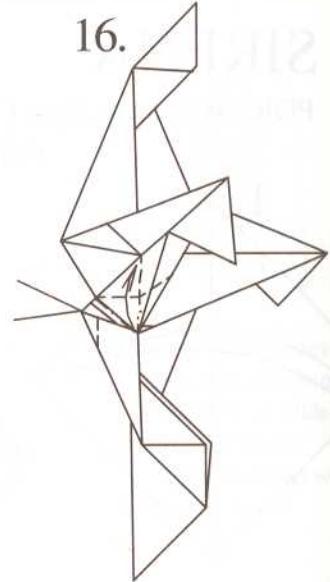
14.



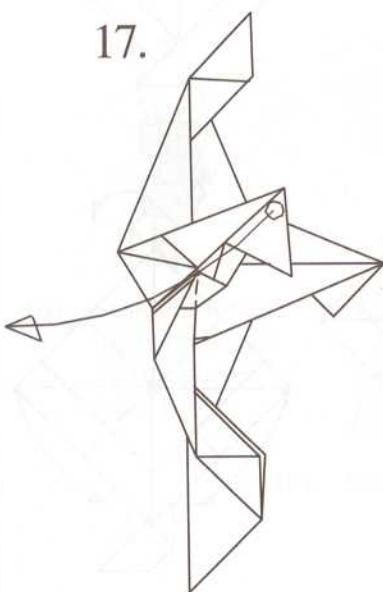
15.



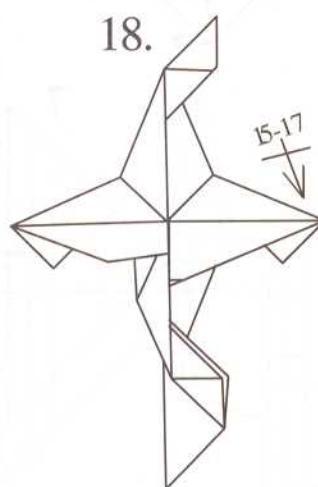
16.



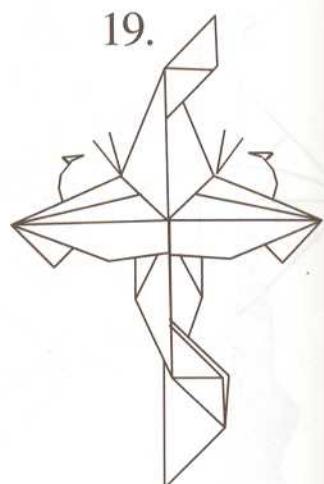
17.



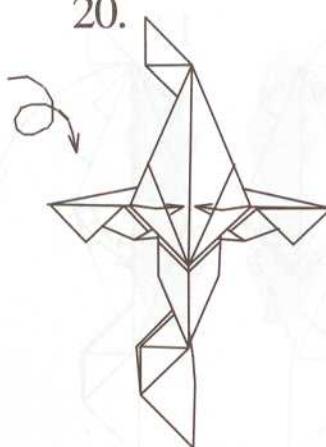
18.



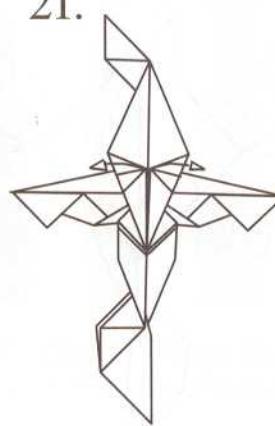
19.



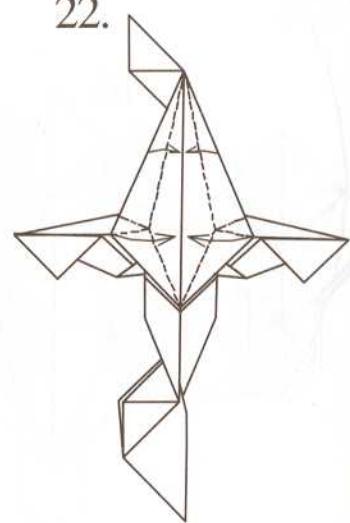
20.



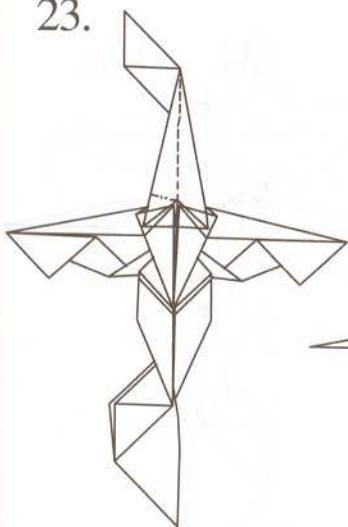
21.



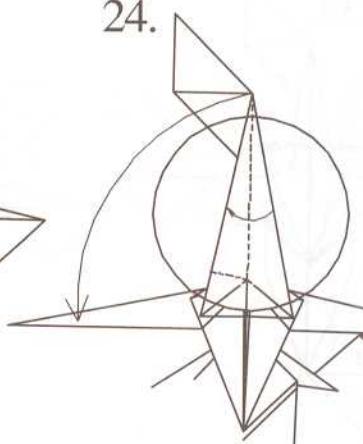
22.



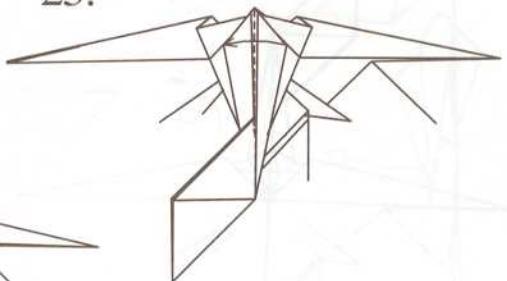
23.



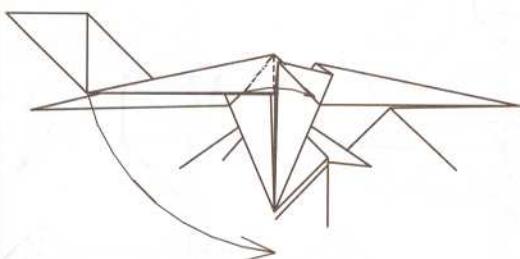
24.



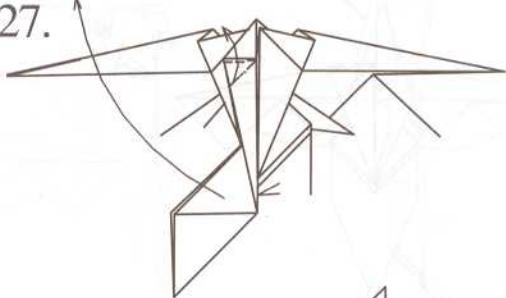
25.



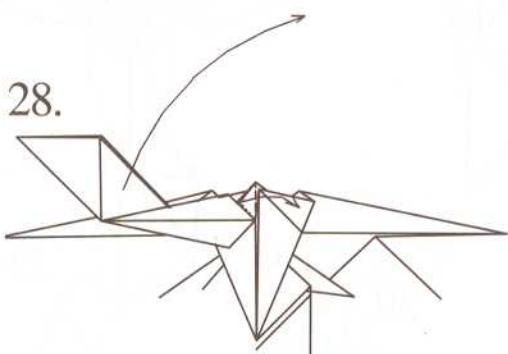
26.



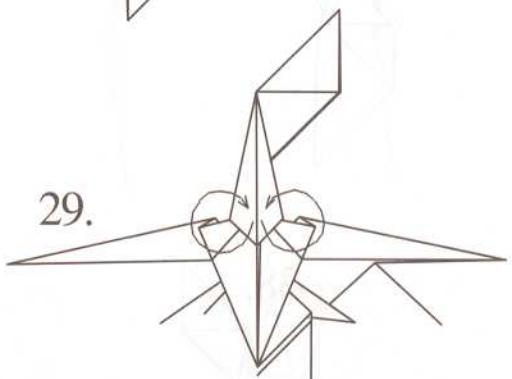
27.



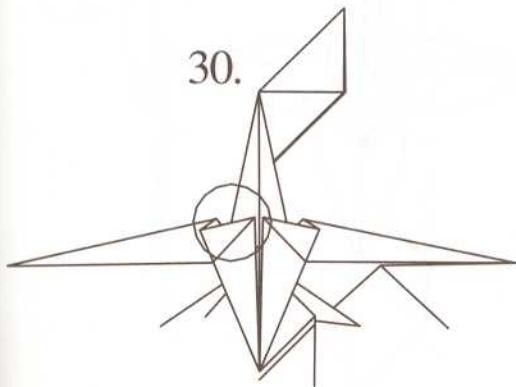
28.



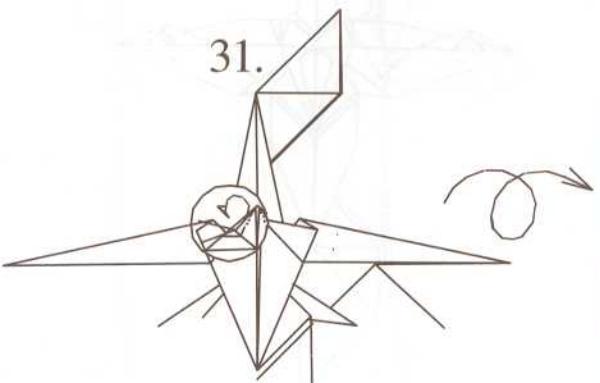
29.



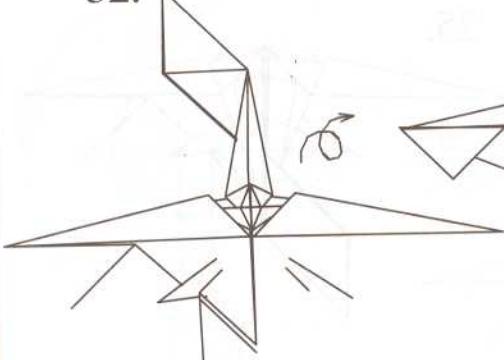
30.



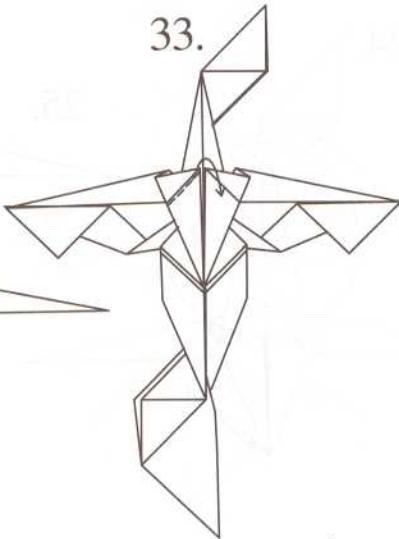
31.



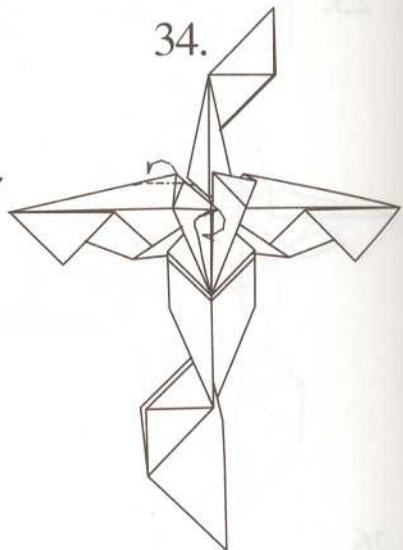
32.



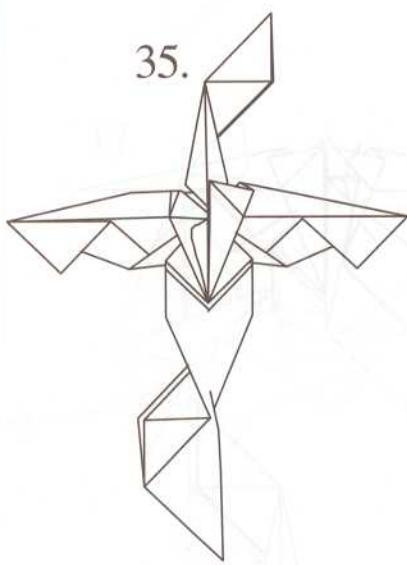
33.



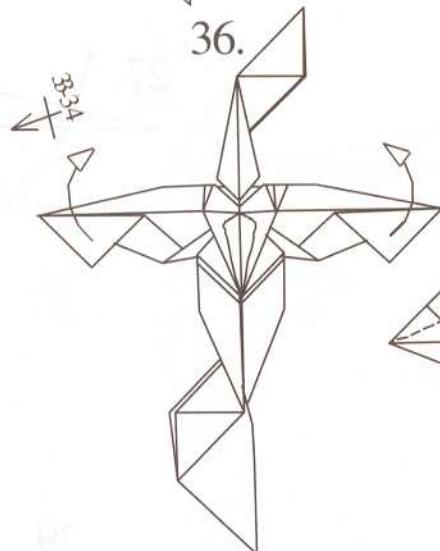
34.



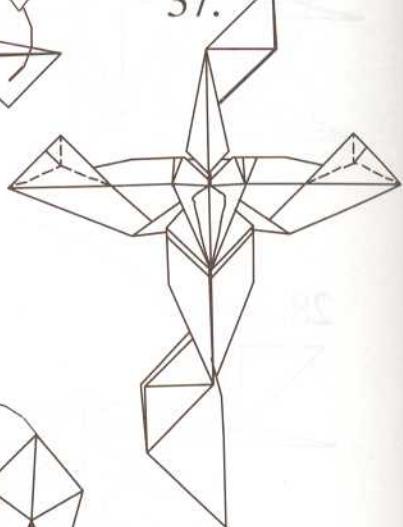
35.



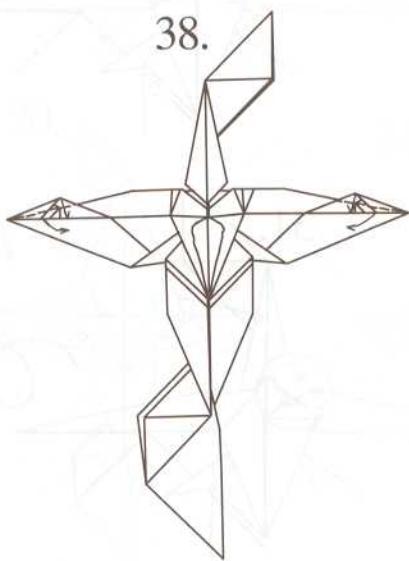
36.



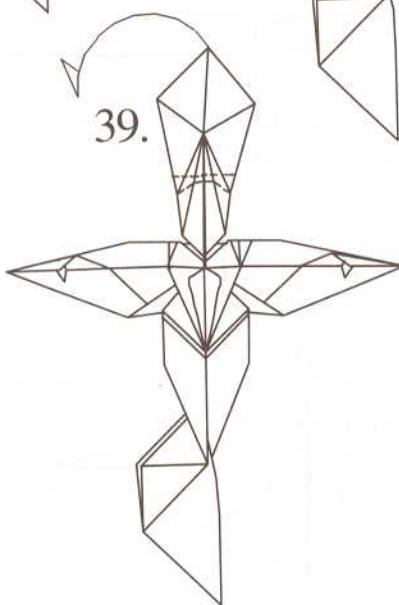
37.

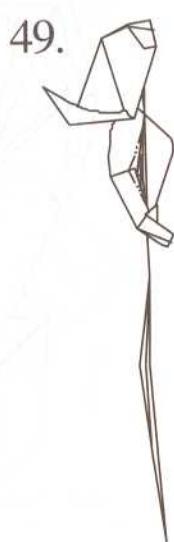
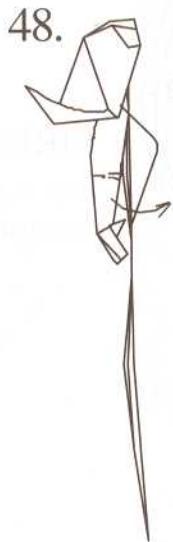
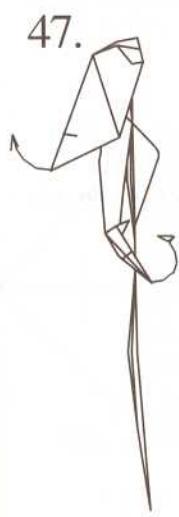
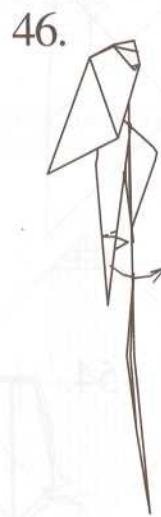
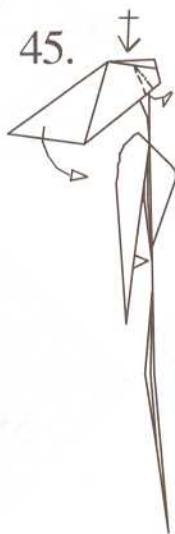
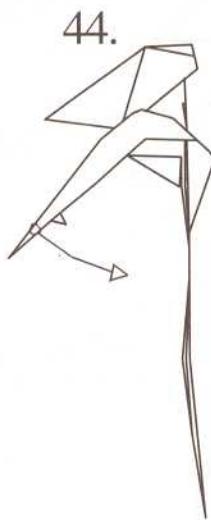
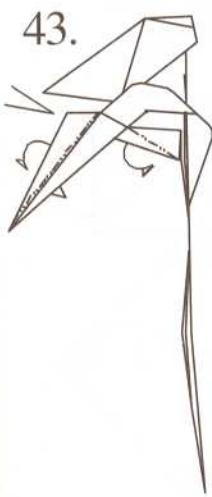
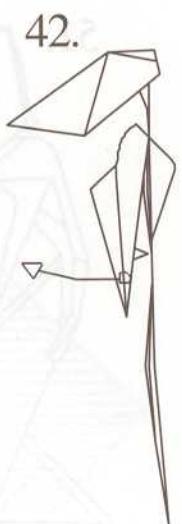
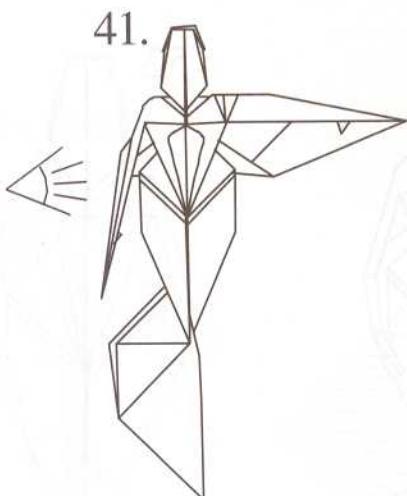
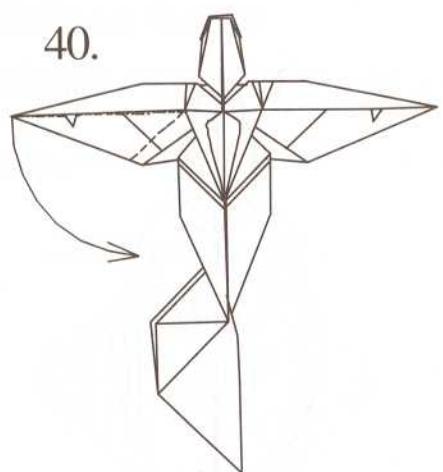


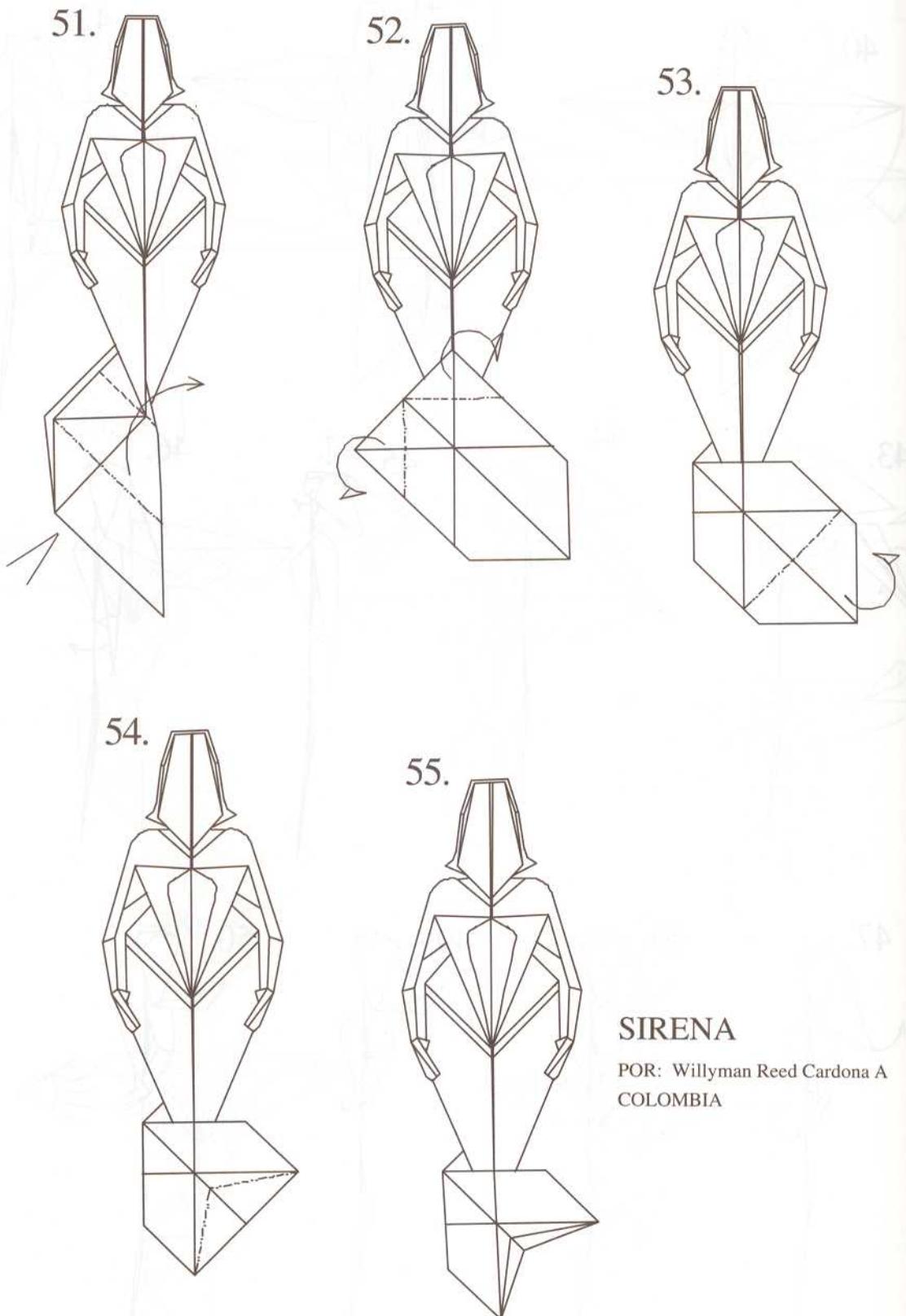
38.



39.







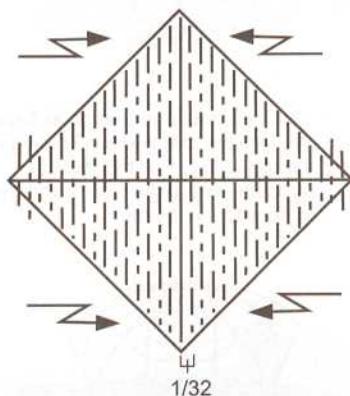
SIRENA

POR: Willyman Reed Cardona A
COLOMBIA

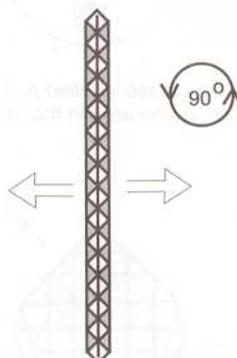
Golden Snitch

designed and diagrammed by Peter Farina

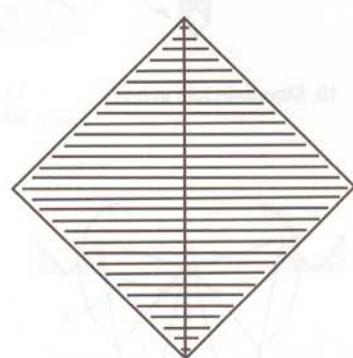
A 12 cm square makes a golden snitch with a ~12.5 cm wingspan.



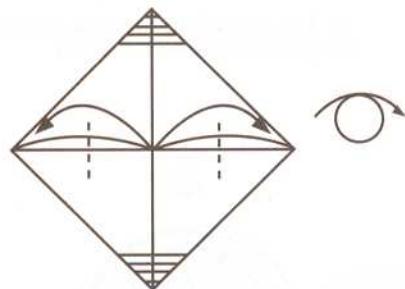
1. For best results, use gold foil. Divide into thirtyseconds (1/32) and pleat.



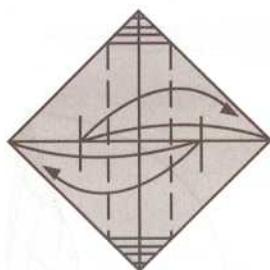
2. Unfold and turn the paper so the creases are horizontal.



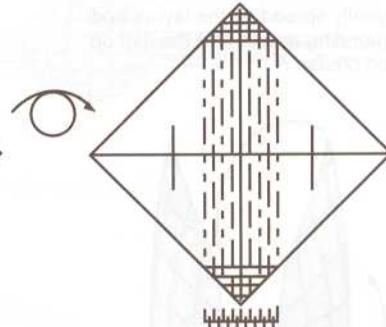
3. The next diagrams have some creases omitted to make them clearer.



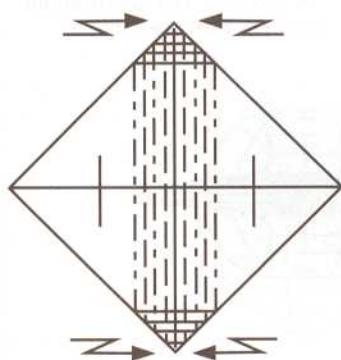
4. Fold the corners to the center and make a light crease. Unfold. Turn over.



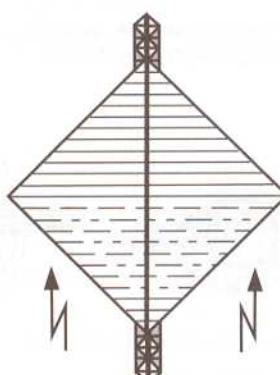
5. Fold the corner to the crease made in step 4 and unfold. Repeat on the other side.



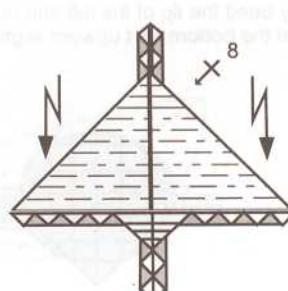
6. Divide the area between the creases made in step 5 into 8 equal sections.



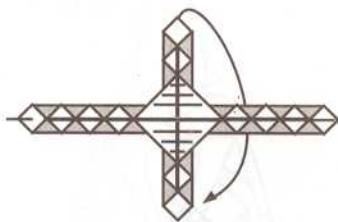
7. Pleat.



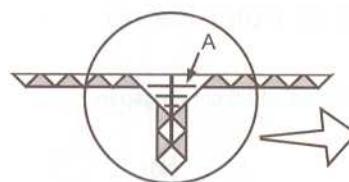
8. Pleat on existing creases.



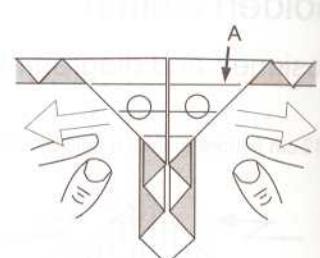
9. Repeat step 8 on the top half.



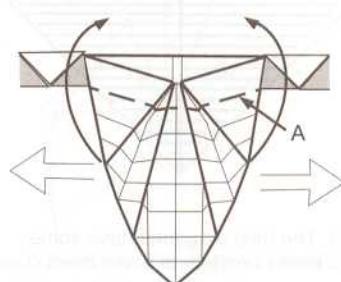
10. Mountain fold in half.



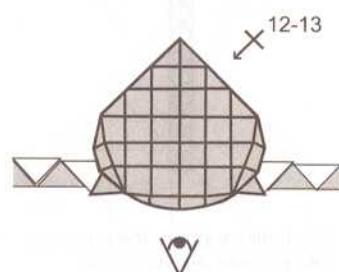
11. Note the crease labelled A. The next steps focus on the area in the circle.



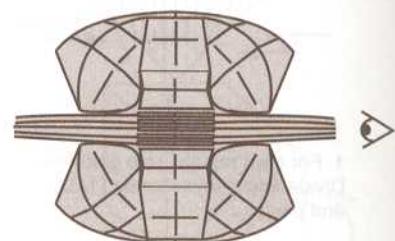
12. Grab the large triangular flaps. (Make sure that you are holding only the top layer.) Pull the flaps in opposite directions slowly and gently to spread the layers.



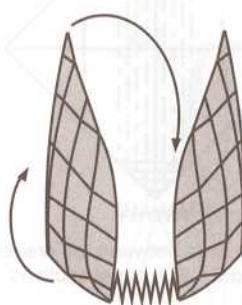
13. From this point on, the model will not lie flat. Keep gently spreading the layers and rounding as you fold the flap up on crease A.



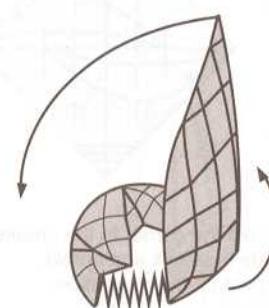
14. Repeat steps 12-13 on the other side.



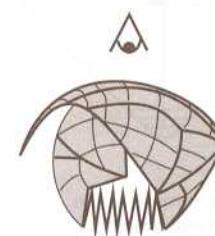
15. This is a view from the back. The next diagram is a view from the side.



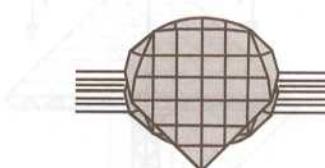
16. Gently bend the tip of the left flap down and swivel the bottom part upward slightly.



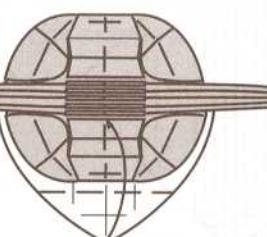
17. Repeat step 16, wrapping the right layer over the left.



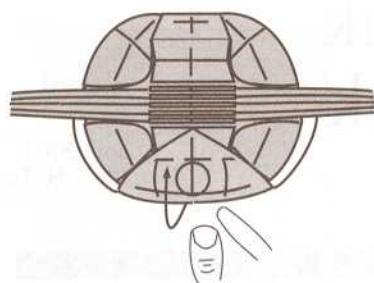
18. Like this. The next diagram is a view from the front.



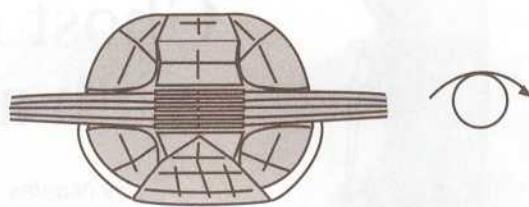
19. Turn over



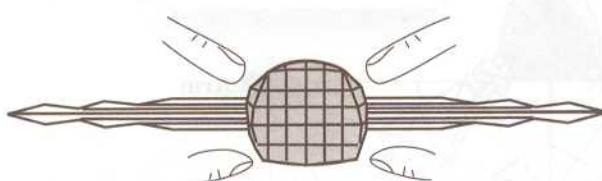
20. Fold the tab up.



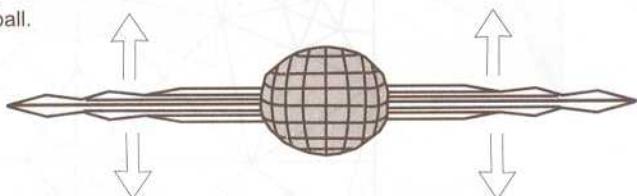
21. Grab the model where indicated, pinch and fold to keep the flap in place.



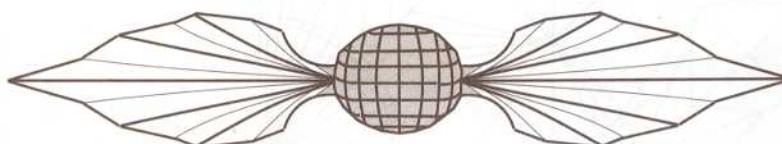
22. Turn model over.



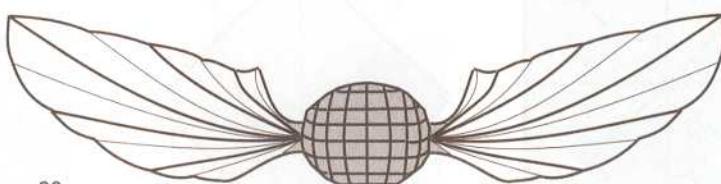
23. Pinch gently to shape the ball.



24. Spread the wings.



25. Shape wings to taste.



26.

Now pick up your wand and enunciate clearly:

Wingardium leviosa

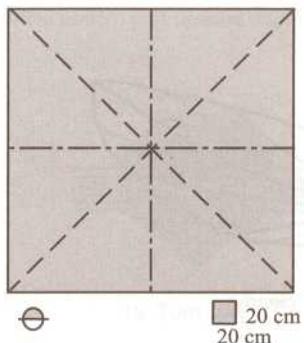
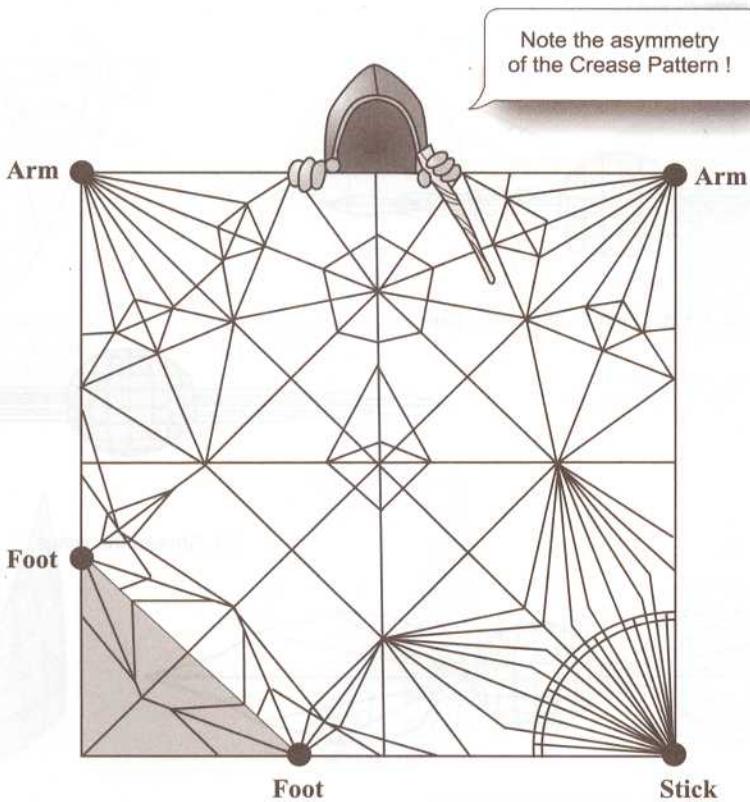


Ghost Monk with a stick

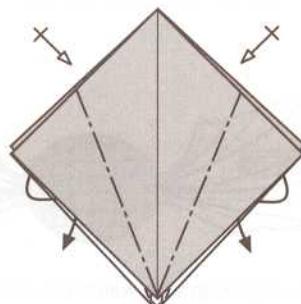
By Nicolas TERRY

april 2003
Diagram : N. Terry

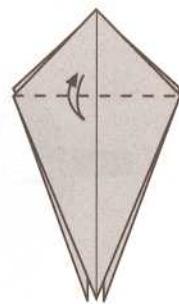
Dimension : a square of 20 cm makes a monk of 7 x 4 cm.



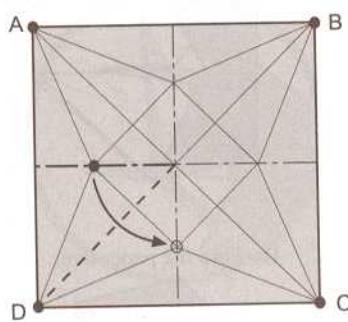
1. Start with white side down.



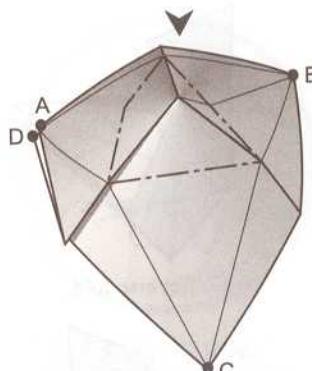
2. Four reverse folds.



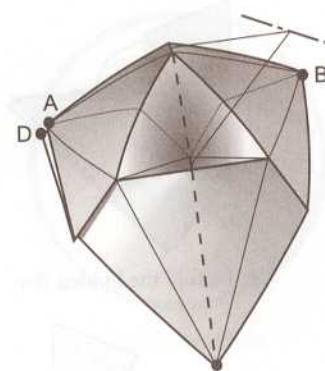
3. Bird Base. Fold and Unfold. Then, unfold until step 1.



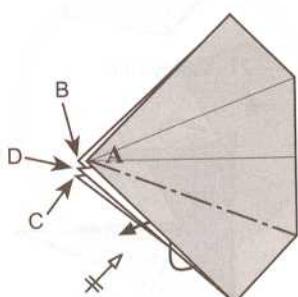
4. The model becomes 3D.
The fold creates a pyramidal shape.



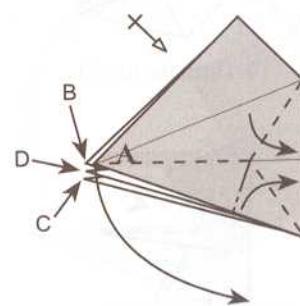
5. Sink the tip.



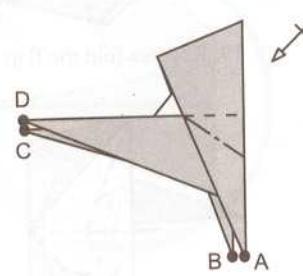
6. Fold in half.



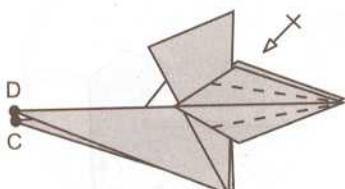
7. Three reverse
folds.



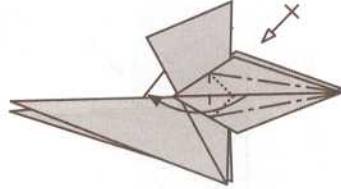
8. Rabbit ear on
the flaps A & B.



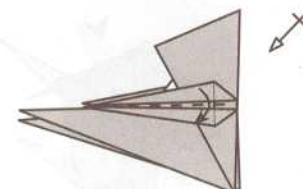
9. Squash Fold.
Repeat behind.



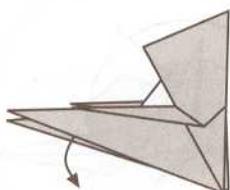
10. Fold and unfold.
Repeat behind.



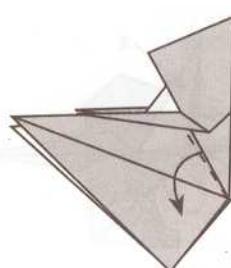
11. Petal-fold.
Repeat behind.



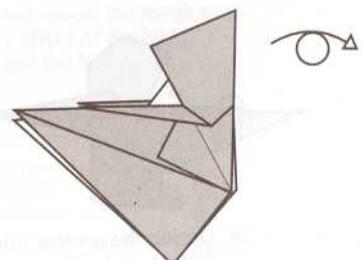
12. Valley fold.
Repeat behind.



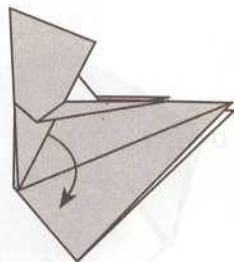
13. Pull the loose paper out.



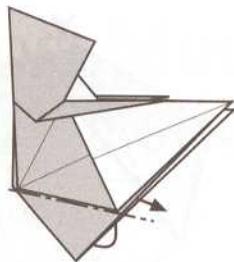
14. Unfold the hidden flap.



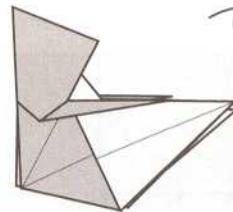
15. Turn the paper over.



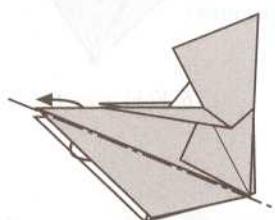
16. Unfold the hidden flap.



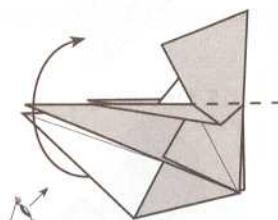
17. Reverse fold.



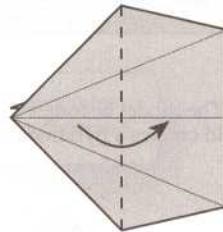
18. Turn the paper over.



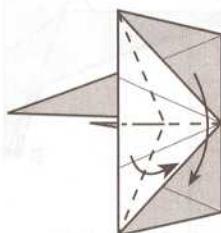
19. Reverse fold the flap.



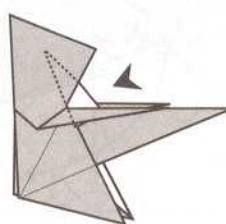
20. Open the model.



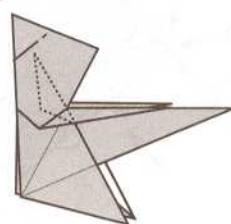
21. Valley fold.



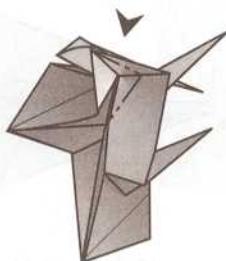
22. Fold the flap.
Turn the paper over.



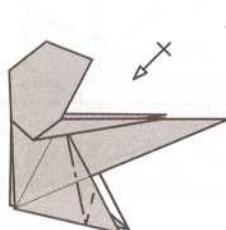
23. Sink the white flap
inside the model.



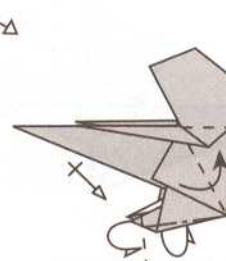
24. Sink the top of the head.
See the next step.



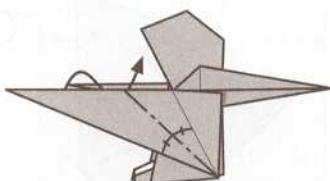
25. Work in progress.



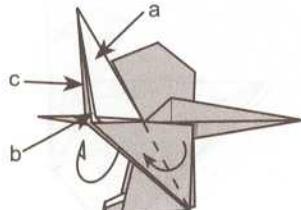
26. Crimp the feet.
Turn the paper over.



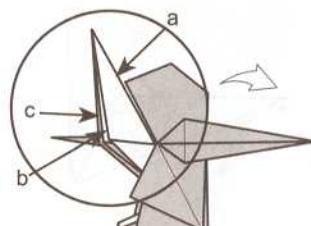
27. Fold the feet. Then open
the left arm and valley
fold the first flap.



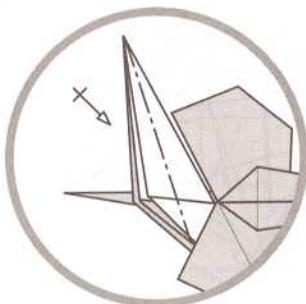
28. During the reverse fold,
put 2 flaps on front (see the
flaps a & b on the next step)
and one behind (flap c).



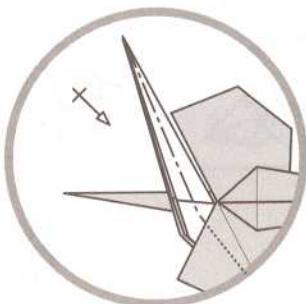
29. Insert the coloured flap
behind the flap a.



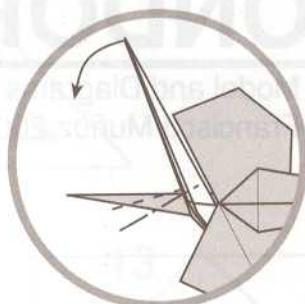
30. The flaps b & c will be
now fold together as one flap.



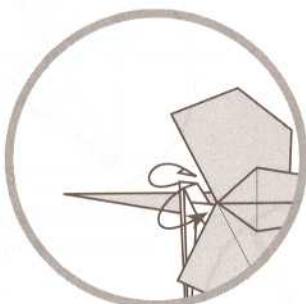
31. Mountain fold and repeat behind
(Enlarged view).



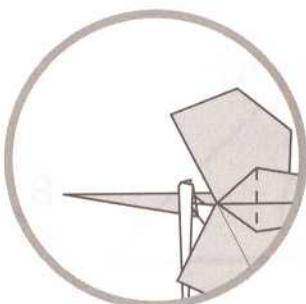
32. Continue to refine the stick from the top to the base.
Repeat behind.



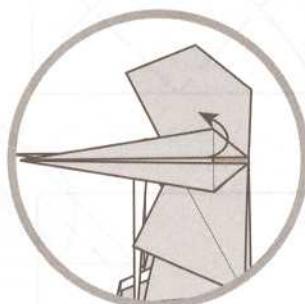
33. Reverse fold.



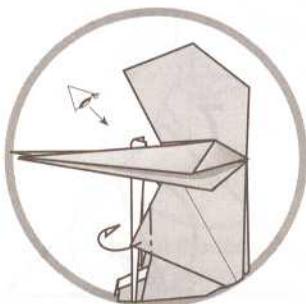
34. Model the stick.



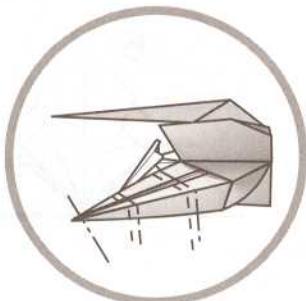
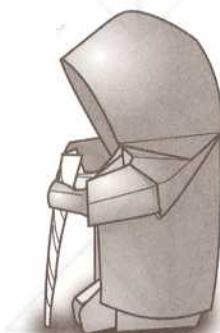
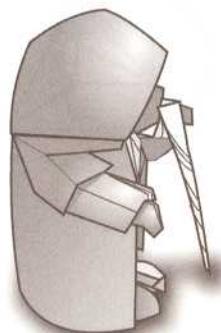
35. Valley fold the arm.



36. Open only the upper flap.
The arm becomes 3D.



37. Mountain fold the flap.



38. Crimp the arms. Then repeat steps 34 to 36 on the other arm.

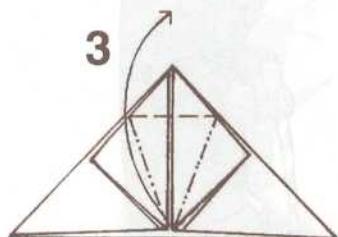
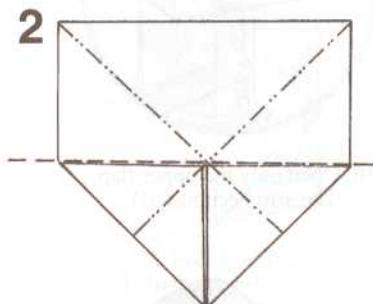
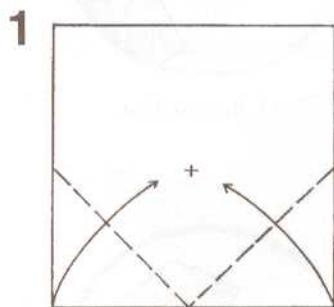
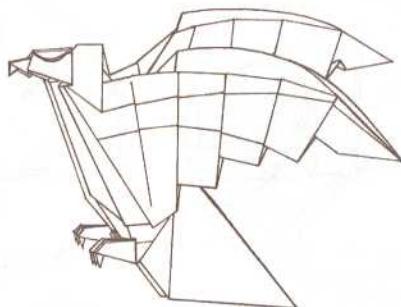
39. Twist the stick and model the monk to emphasize the 3D effect of the head, the arms and the body.

Creation & Diagram : N. Terry
April 2003

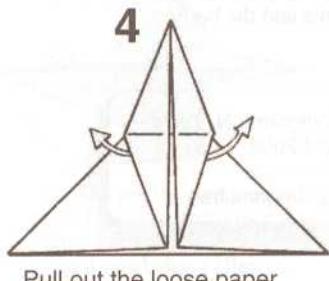
<http://design.origami.free.fr>

CONDOR

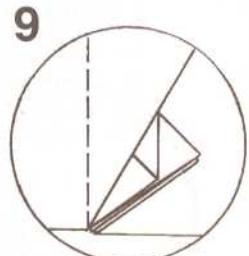
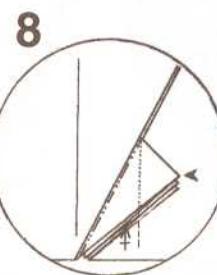
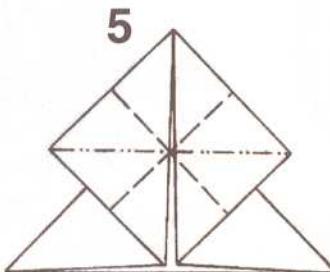
Model and Diagrams by
Francisco Muñoz 2003



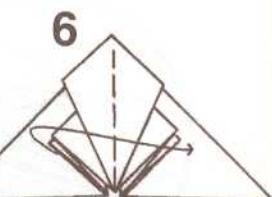
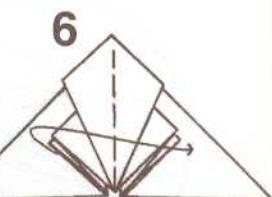
Lift top layer along the creases

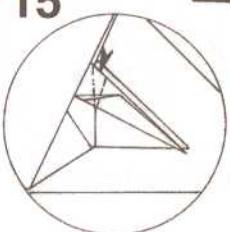
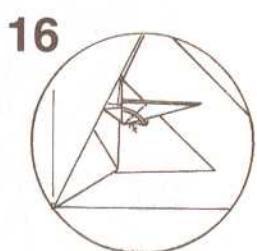
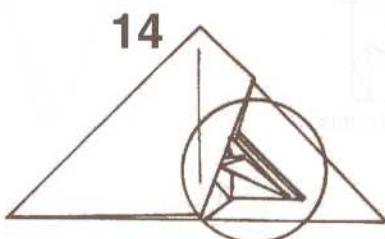
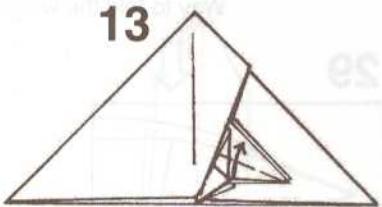
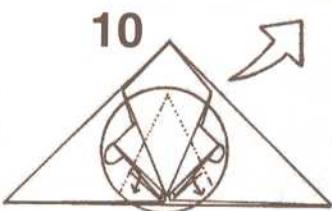
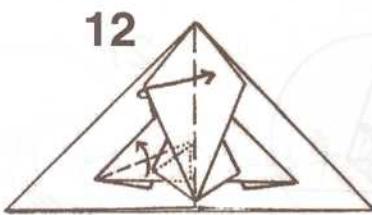
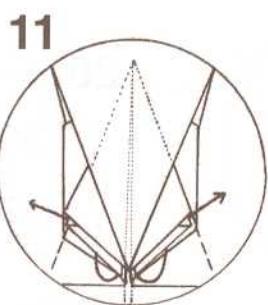


Pull out the loose paper



Return the layers
folded on step 6

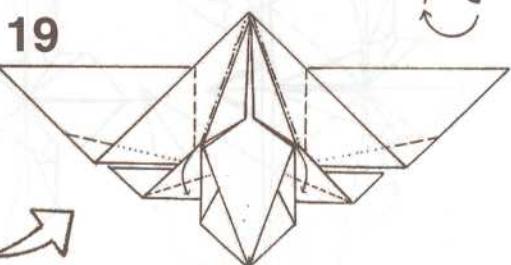
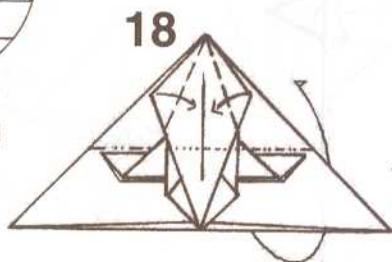


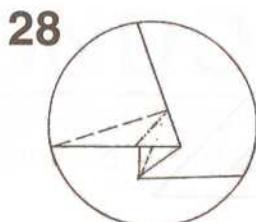


Pull out the loose paper
Repeat behind

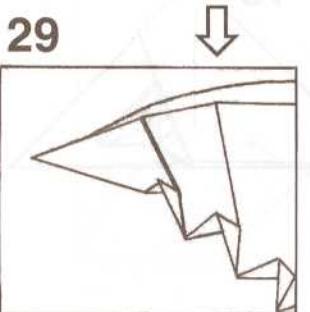
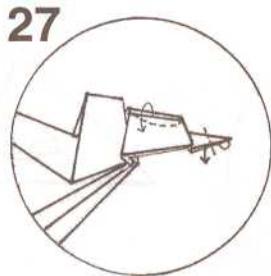


Repeat steps
12 to 17 behind

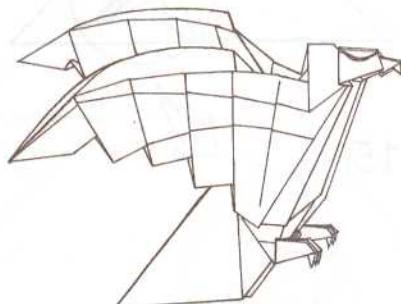
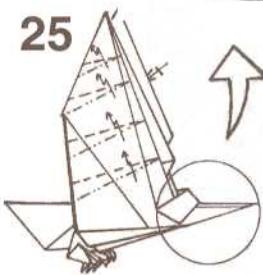
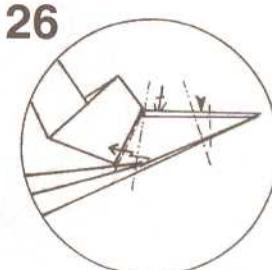




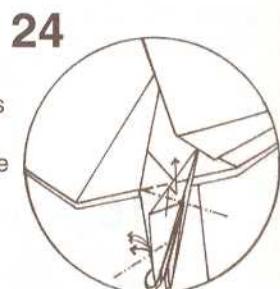
Posterior vision.
Way to fold the wings



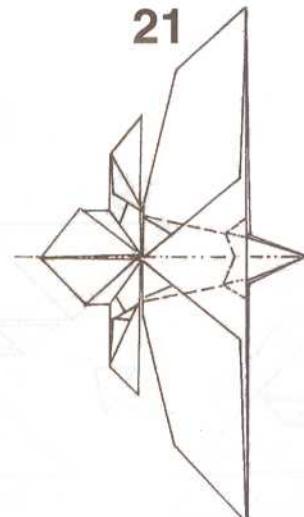
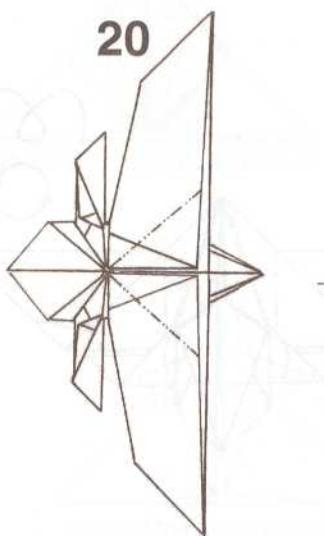
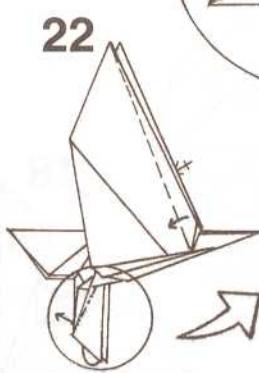
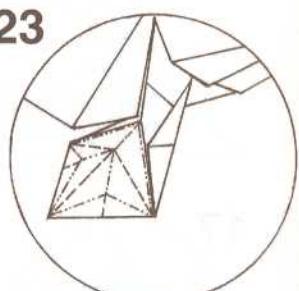
The wings should look like this
(Posterior avision)

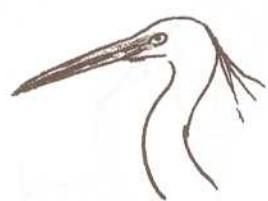


the completed condor



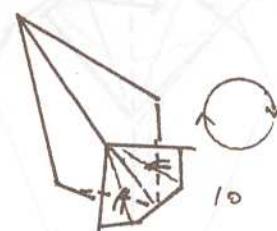
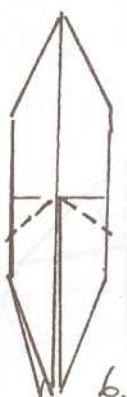
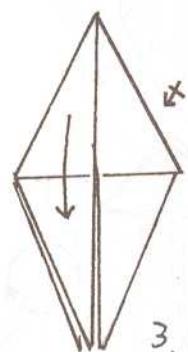
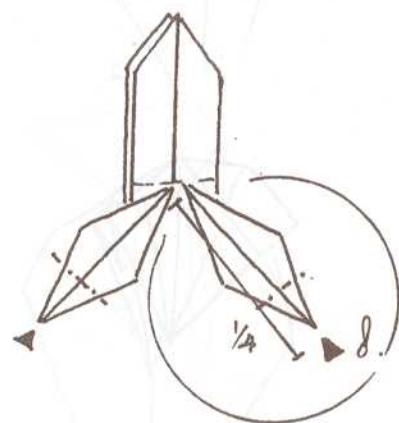
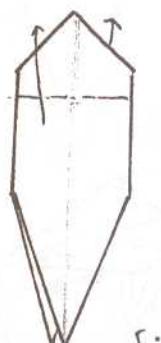
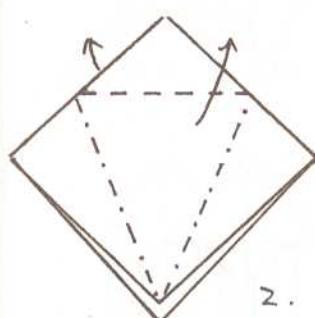
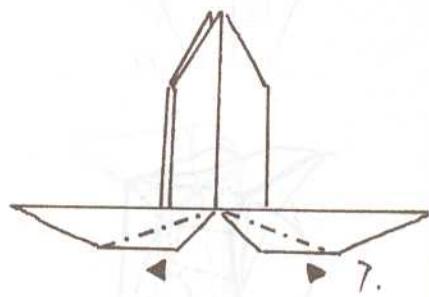
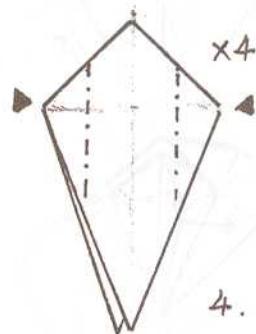
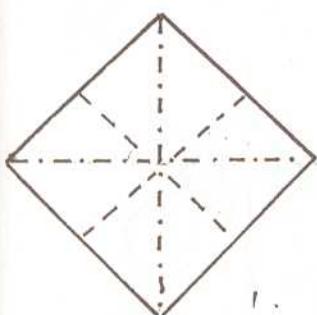
Repeat steps
22 to 24 on
the other side

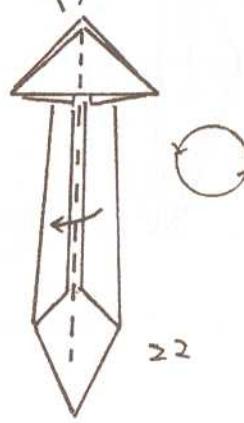
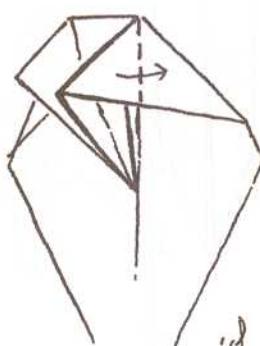
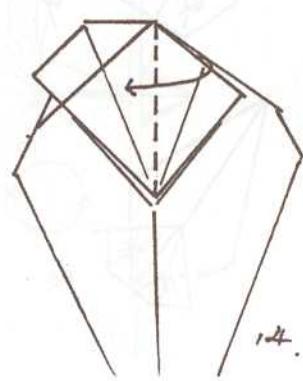
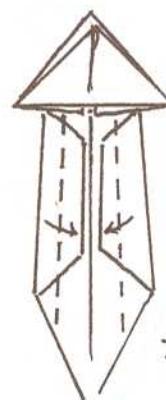
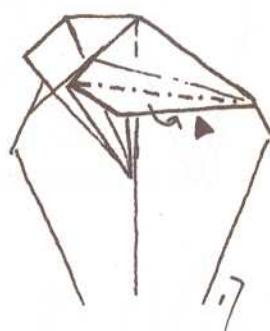
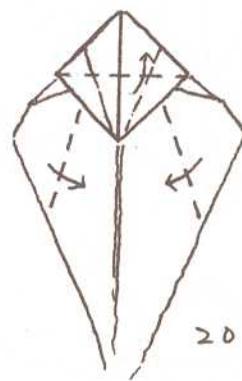
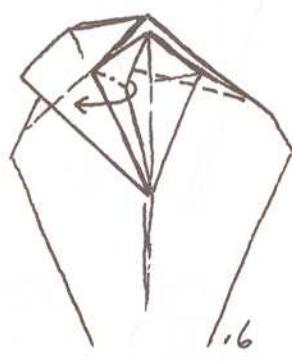
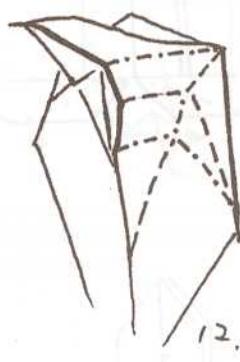
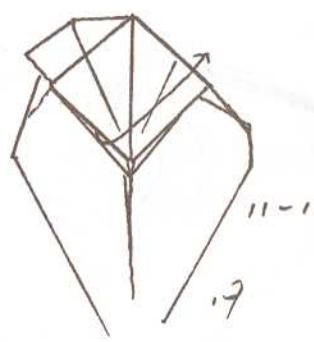
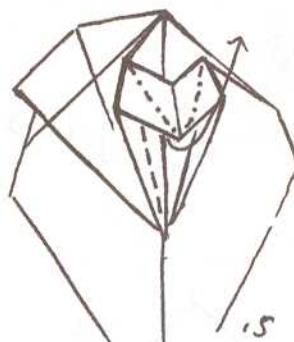
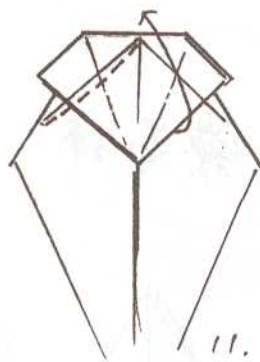


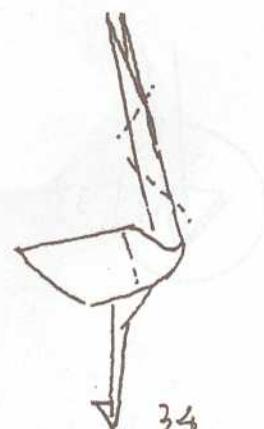
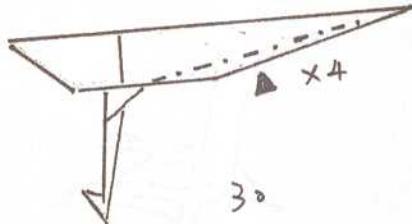
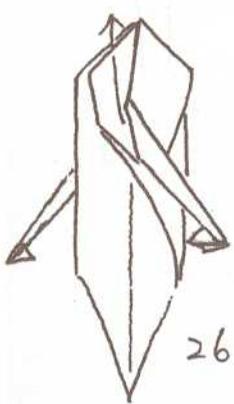
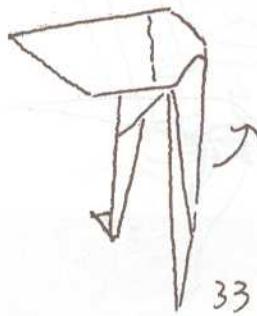
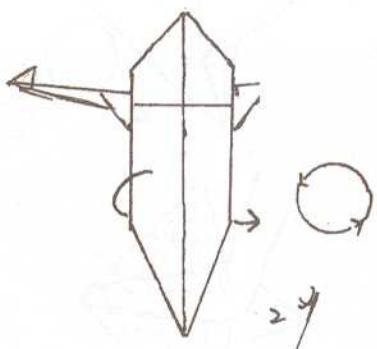
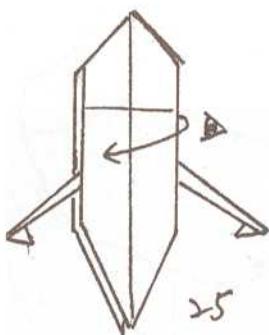
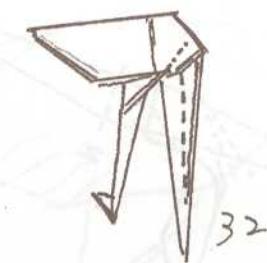
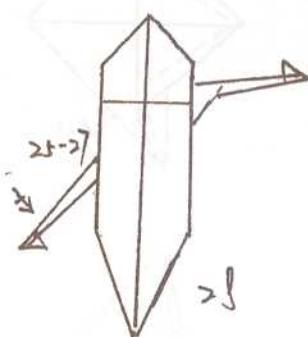
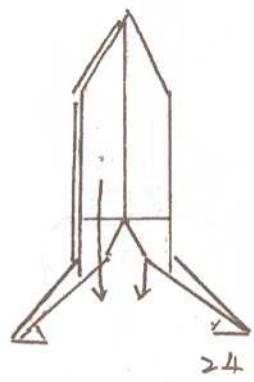
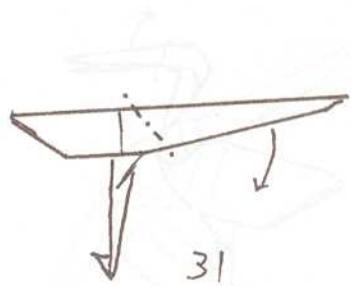
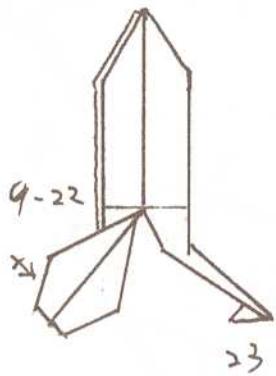


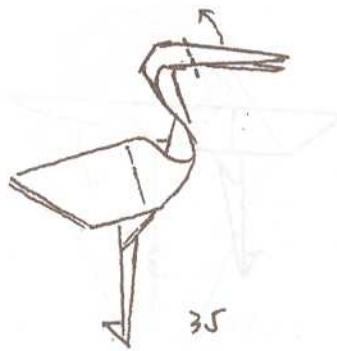
小白鷺

作圖於2003年魏昌輝

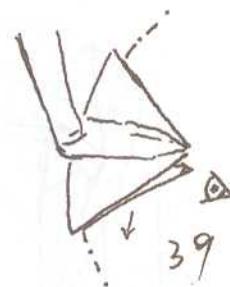




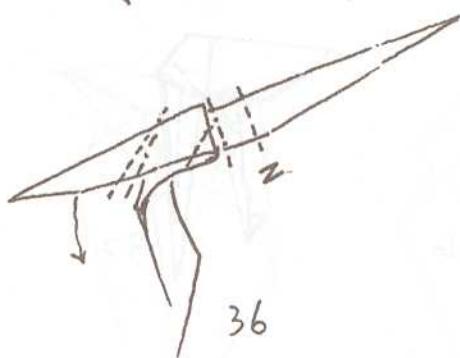




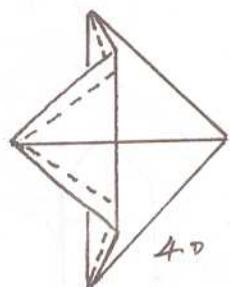
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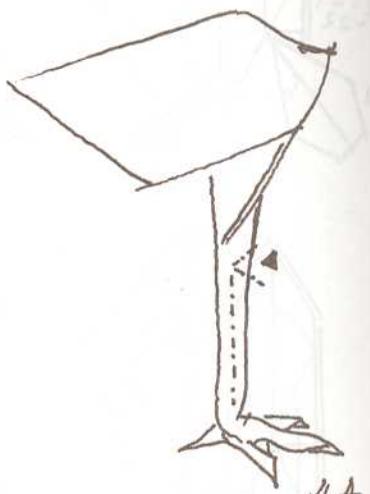
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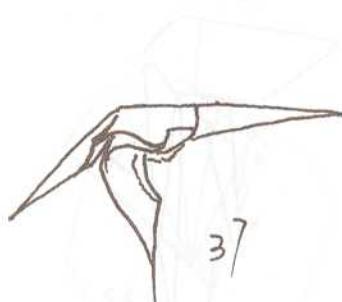
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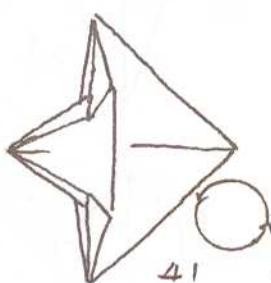
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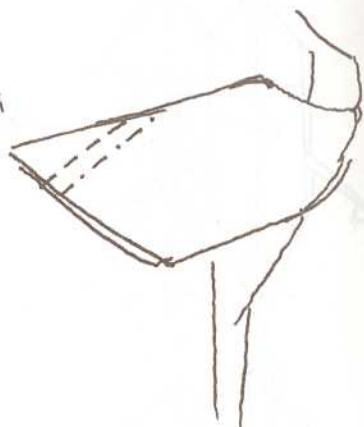
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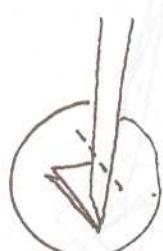
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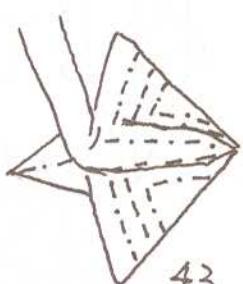
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45



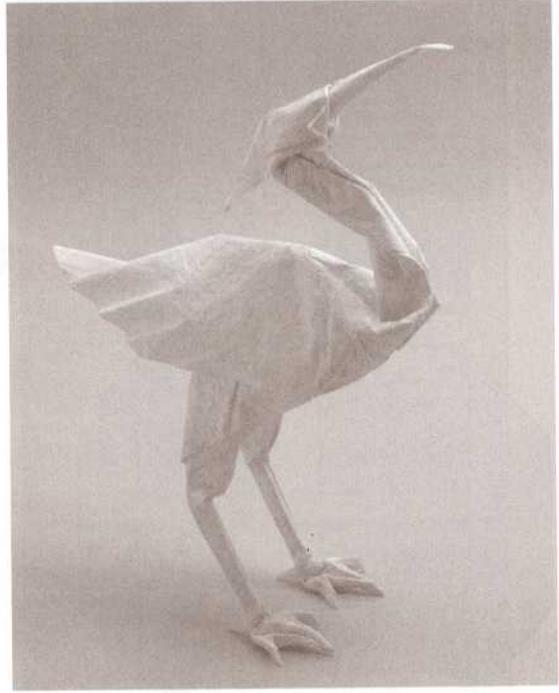
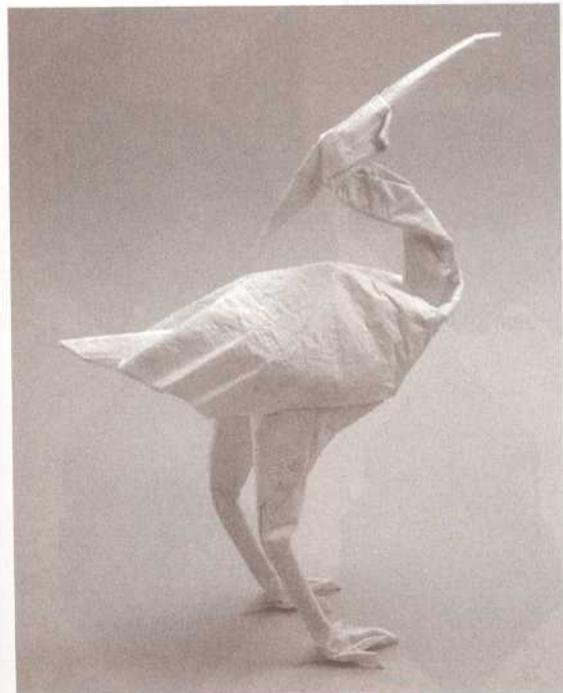
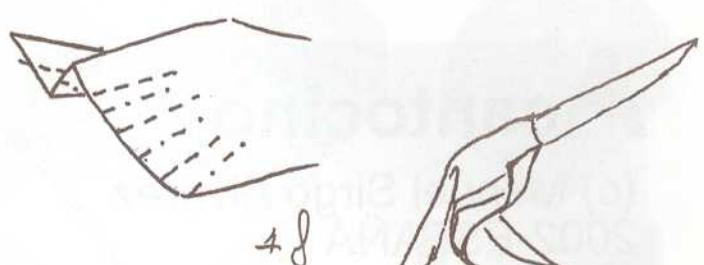
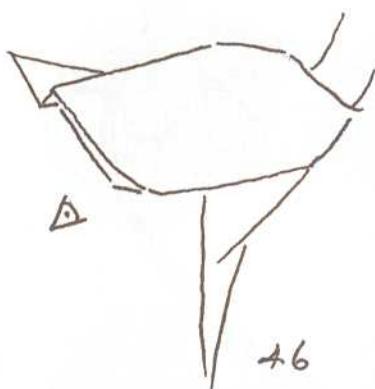
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42

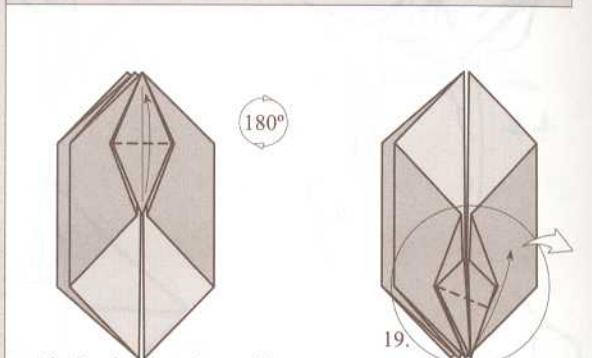
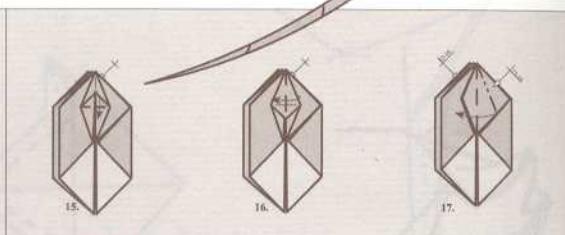
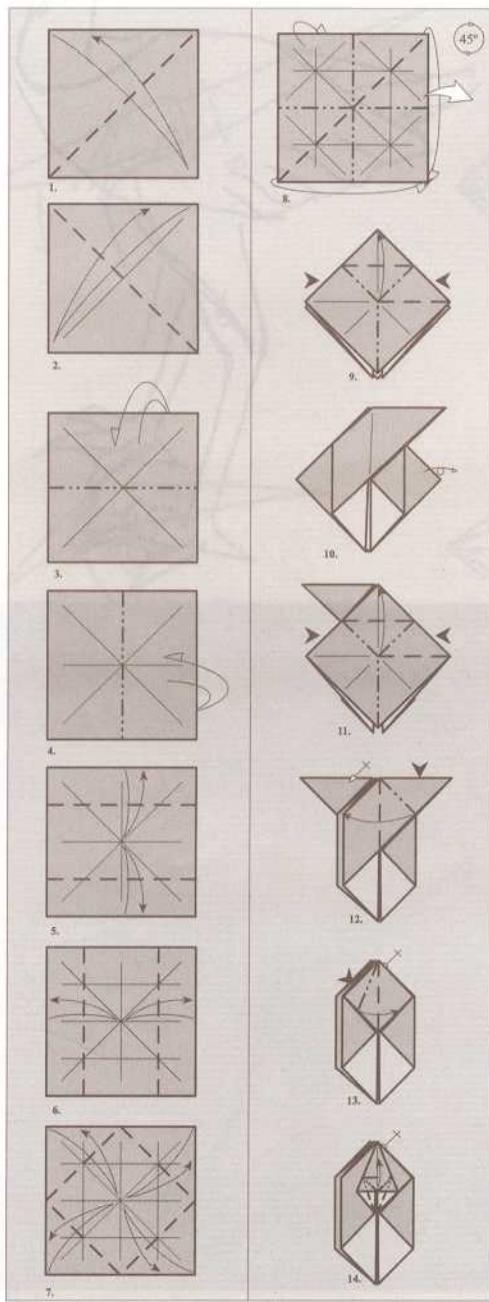
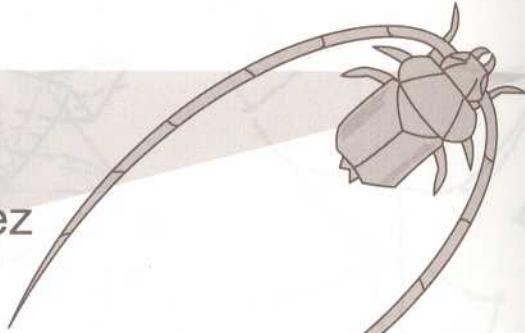


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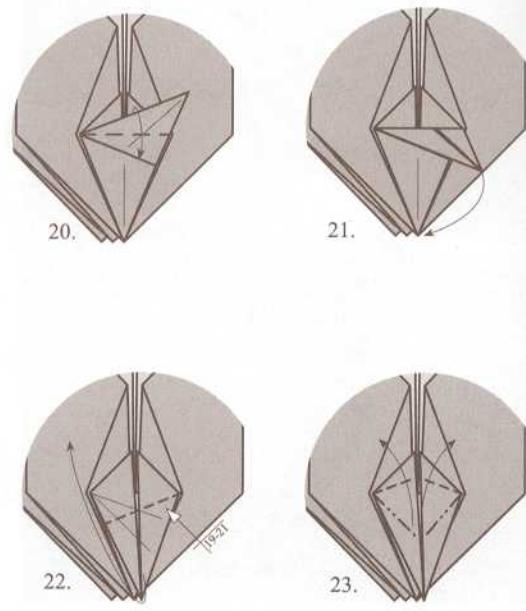


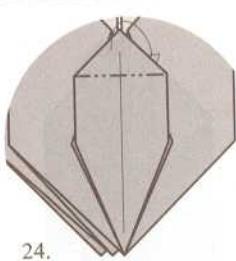
Acantocino

(c) Manuel Sirgo Alvarez
2002-ESPAÑA

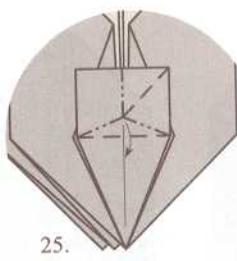


18. Empieza en el paso 18 de la Tabaquera.

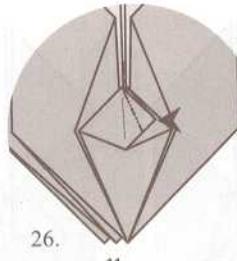




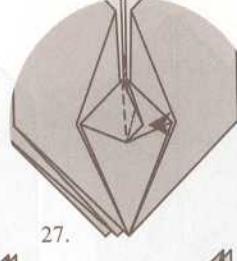
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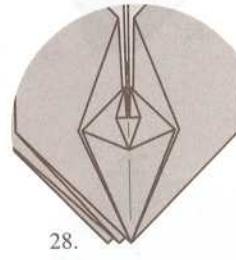
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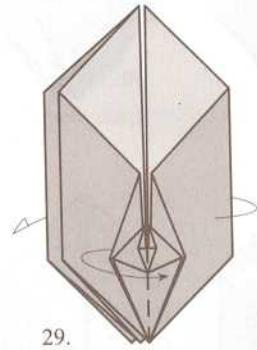
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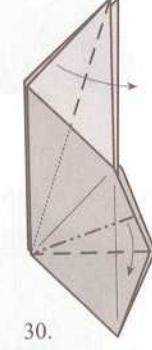
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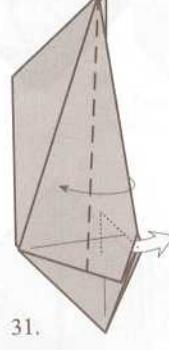
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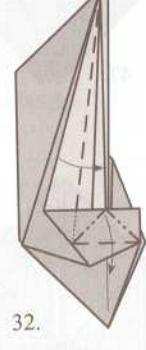
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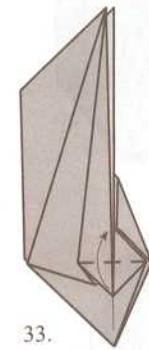
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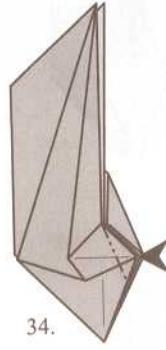
31.



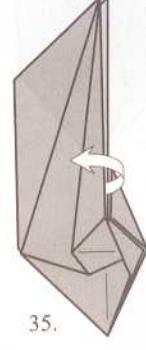
32.



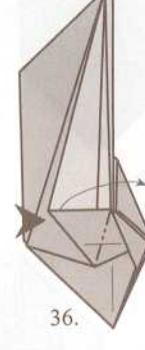
33.



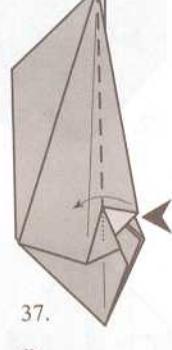
34.



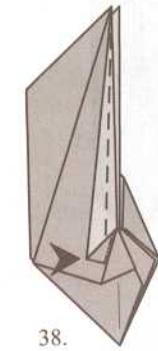
35.



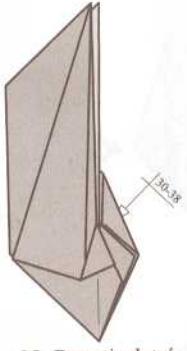
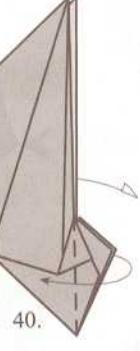
36.



37.



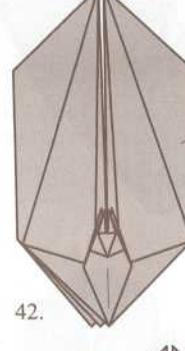
38.

39. Repetir detrás
del paso 30 al 38.

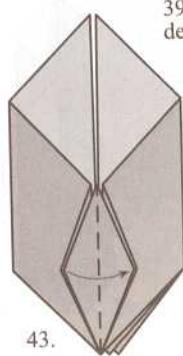
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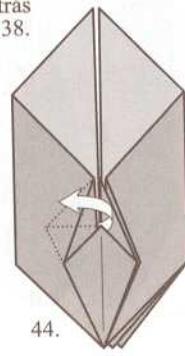
41.



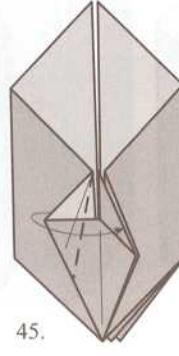
42.



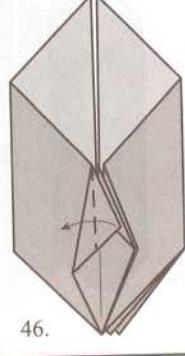
43.



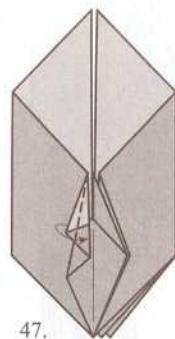
44.



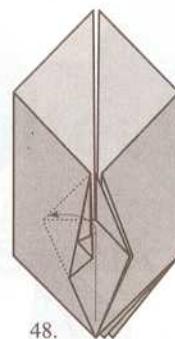
45.



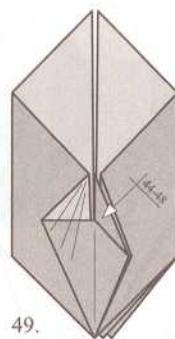
46.



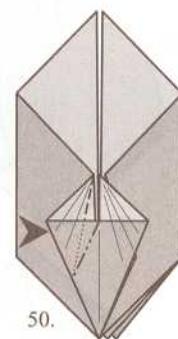
47.



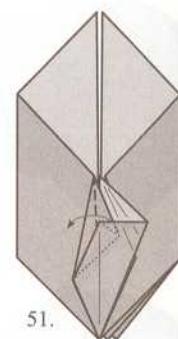
48.



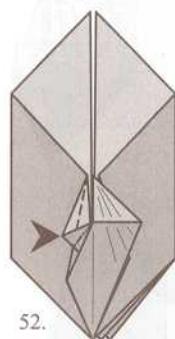
49.



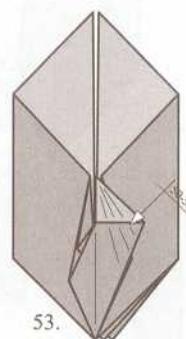
50.



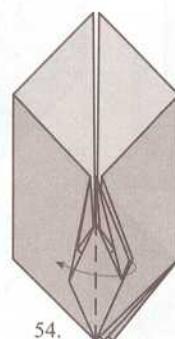
51.



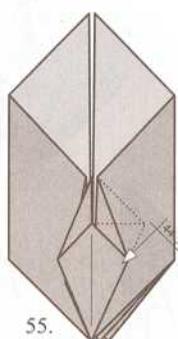
52.



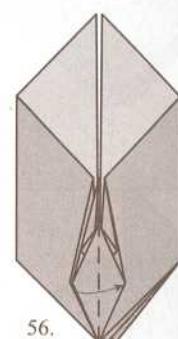
53.



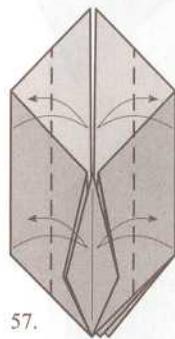
54.



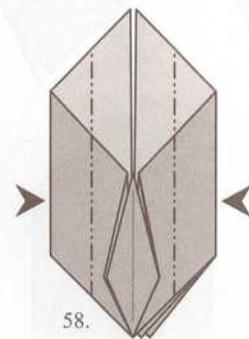
55.



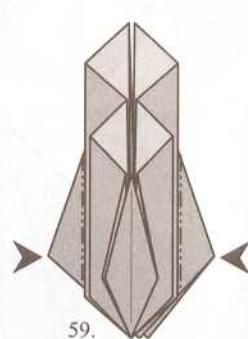
56.



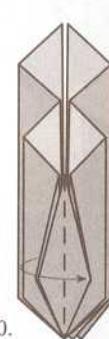
57.



58.



59.



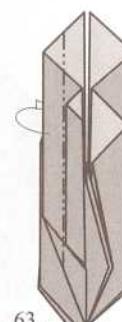
60.



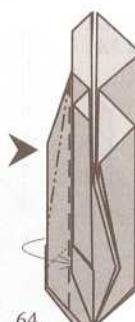
61.



62.



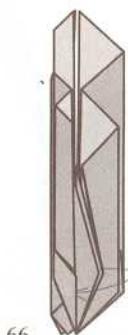
63.



64.



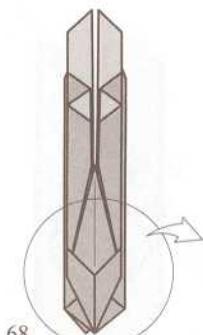
65.



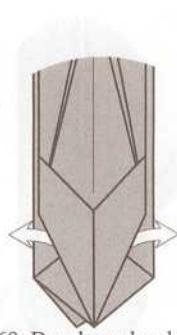
66.



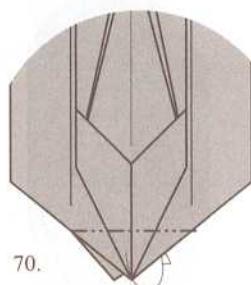
67. Repetir del paso 60
al 66.



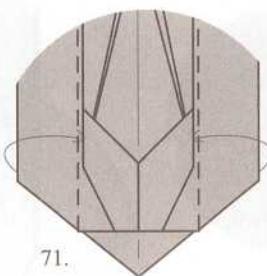
68.



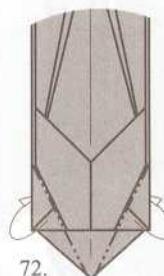
69. Desplegar las dos
capas.



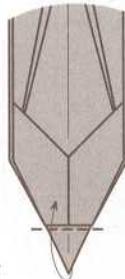
70.



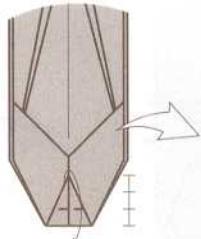
71.



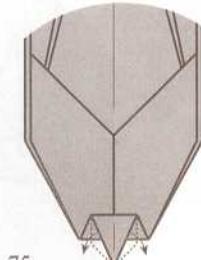
72.



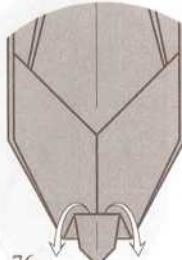
73.



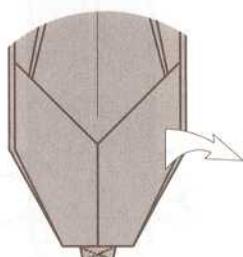
74.



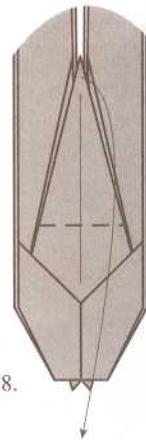
75.



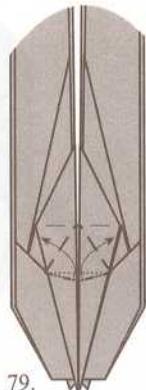
76.



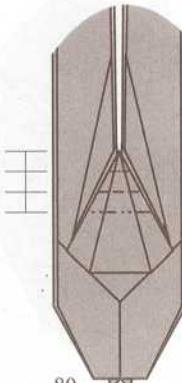
77.



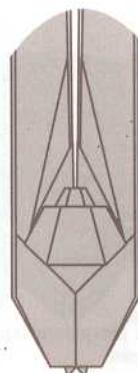
78.



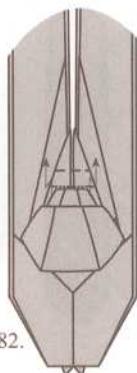
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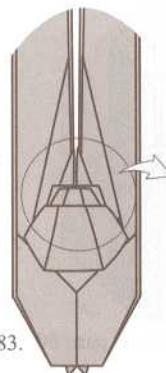
80.



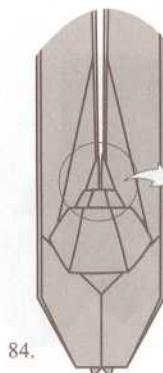
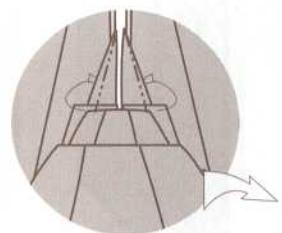
81.



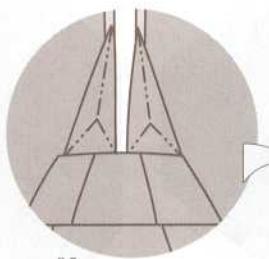
82.



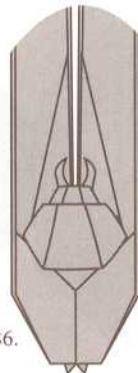
83.



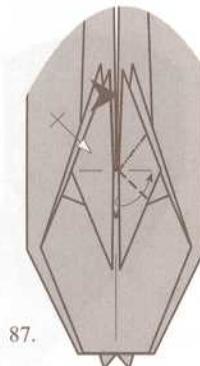
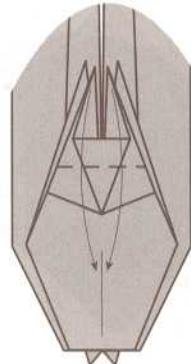
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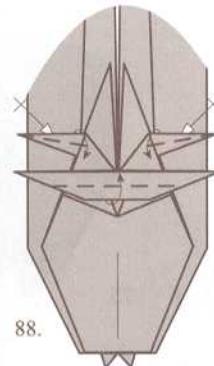
85.



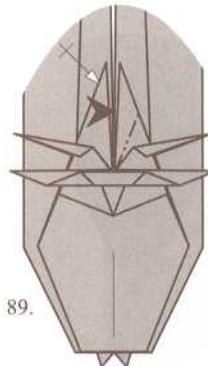
86.



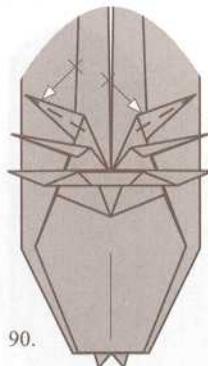
87.



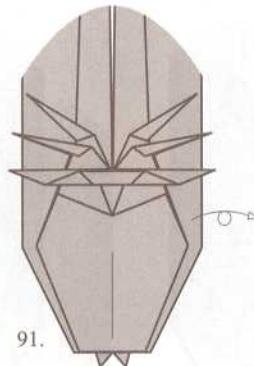
88.



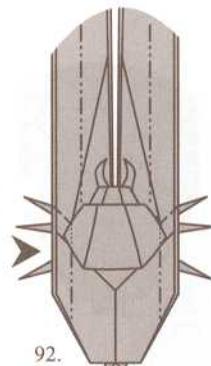
89.



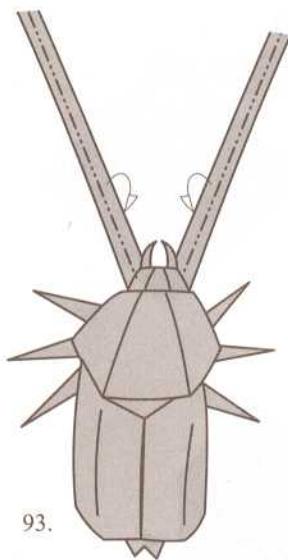
90.



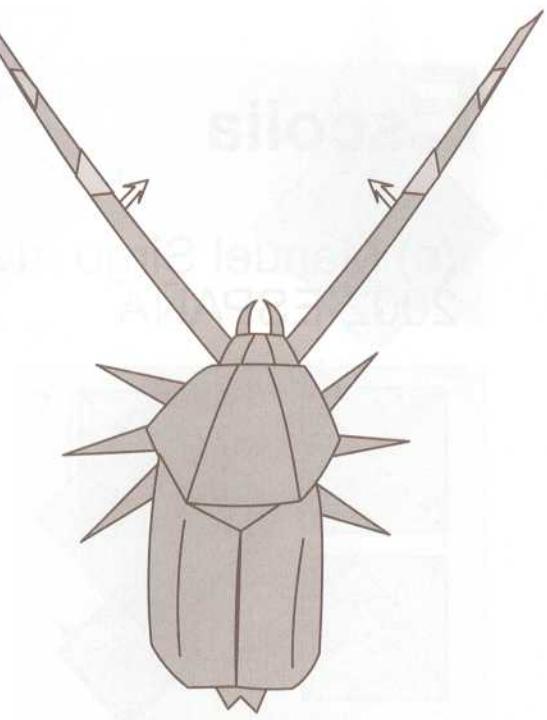
91.



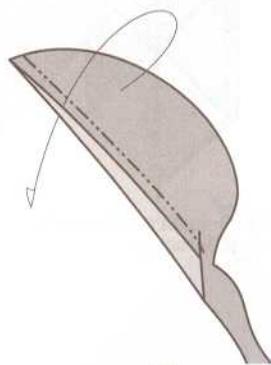
92.



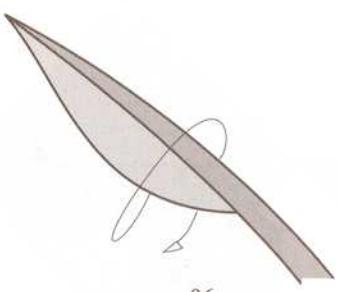
93.



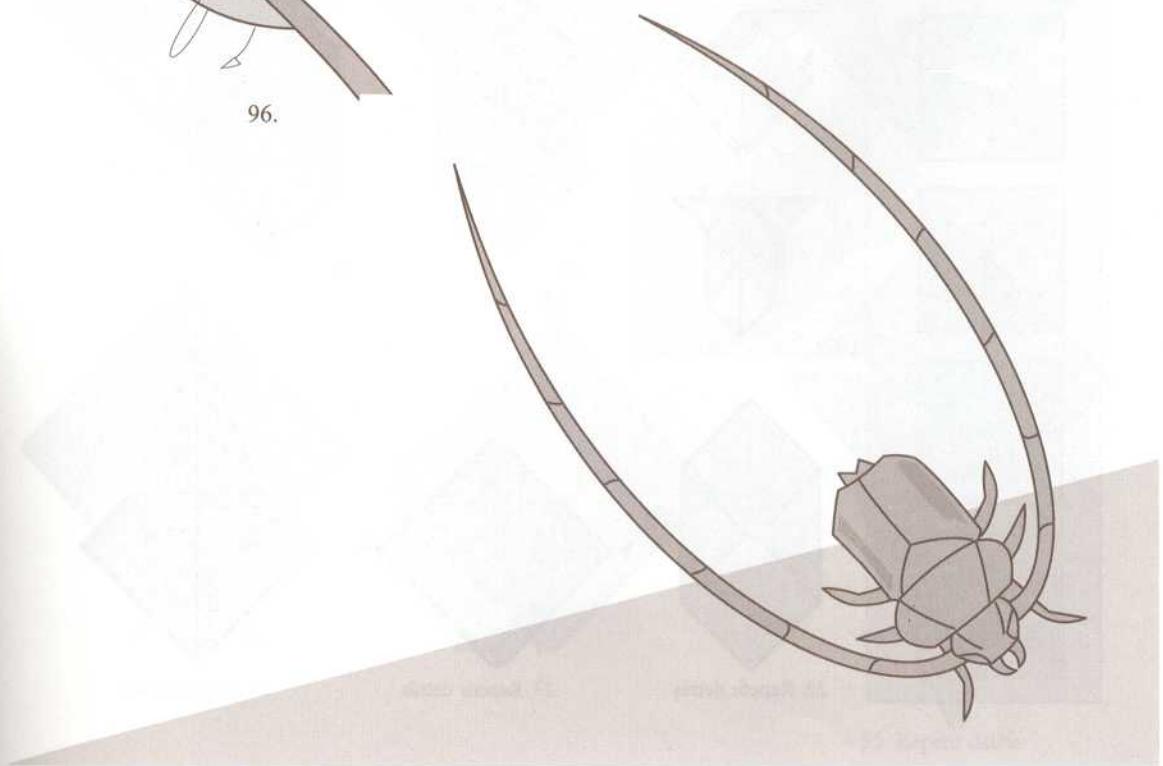
94. Desplegar la antena.



95.

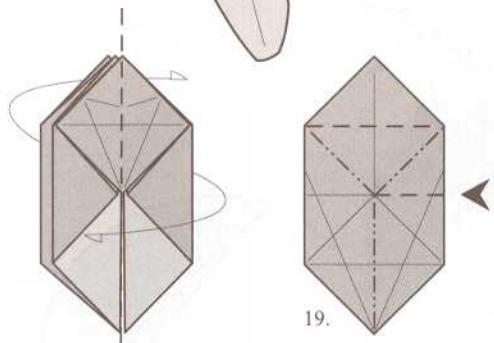
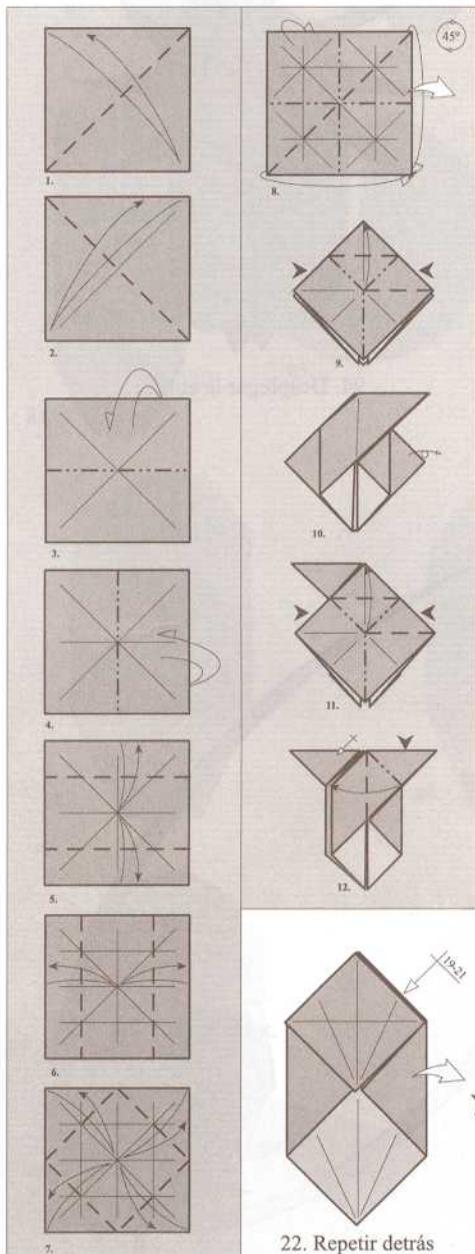


96.

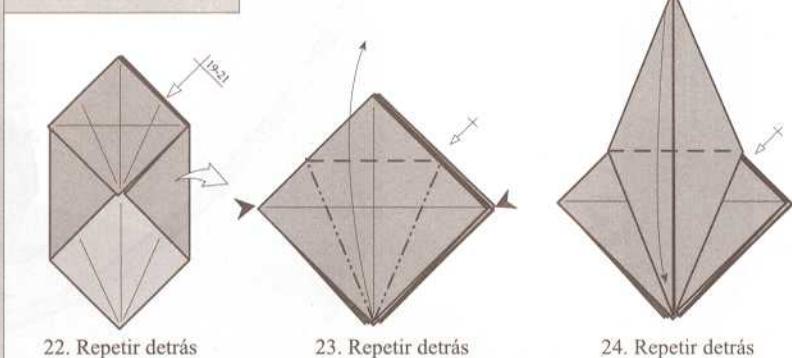
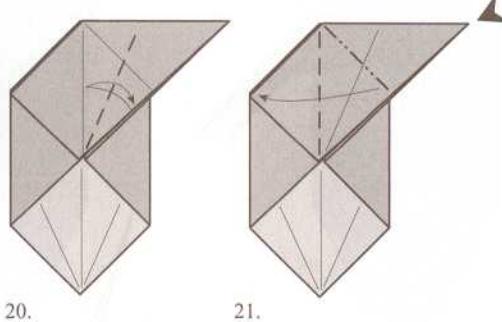


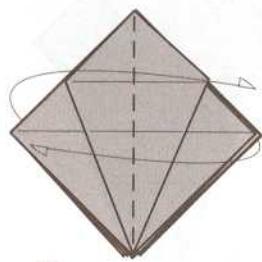
Escola

(c) Manuel Sirgo Alvarez
2002-ESPAÑA

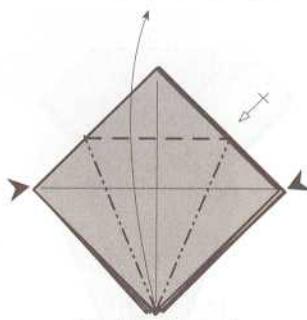


18. Empieza en el paso 12 de la Tabaquera.

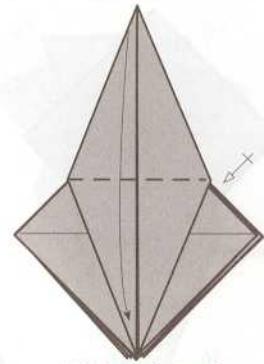




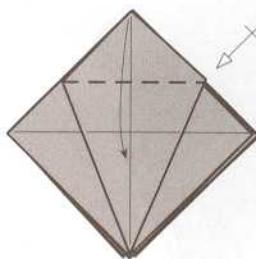
25.



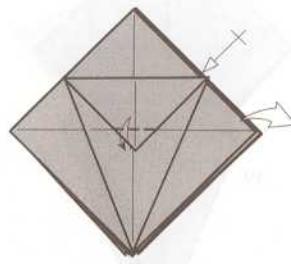
26. Repetir detrás



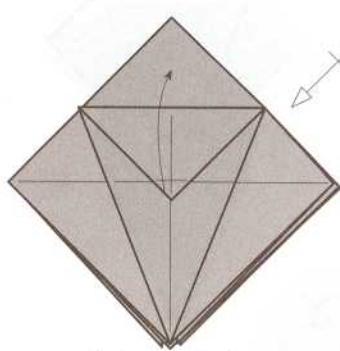
27. Repetir detrás



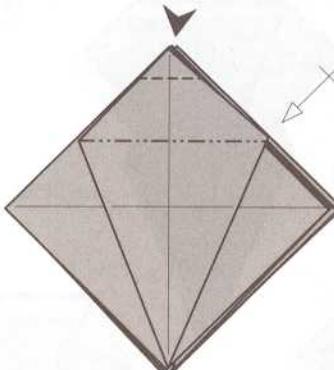
28. Repetir detrás



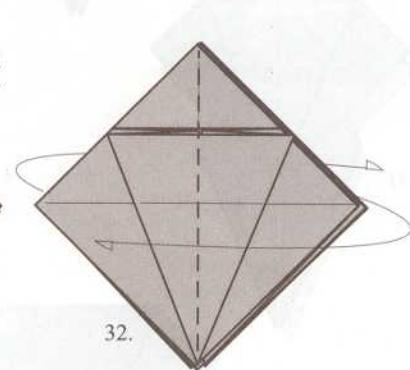
29. Repetir detrás



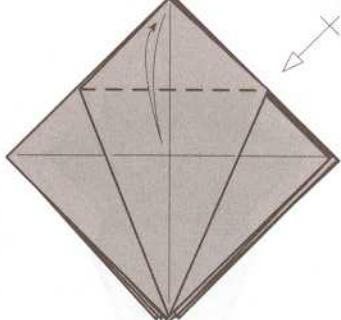
30. Repetir detrás



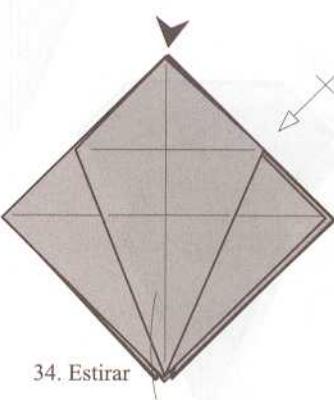
31. Repetir detrás



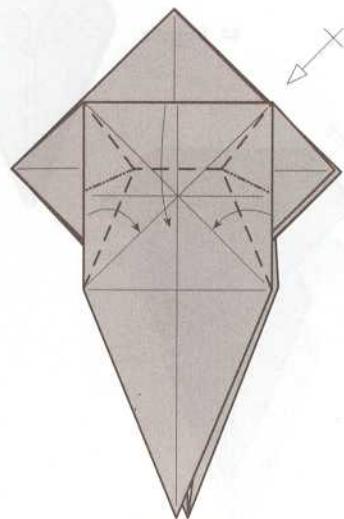
32.



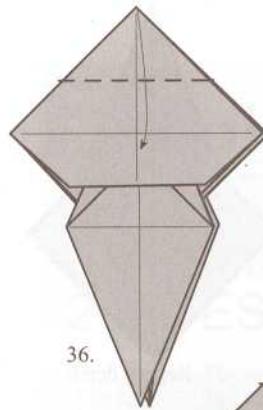
33. Repetir detrás



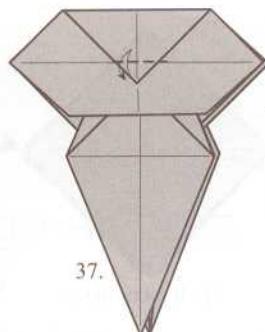
34. Estirar



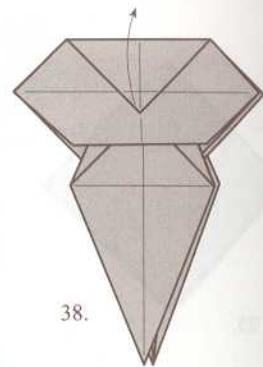
35. Repetir detrás



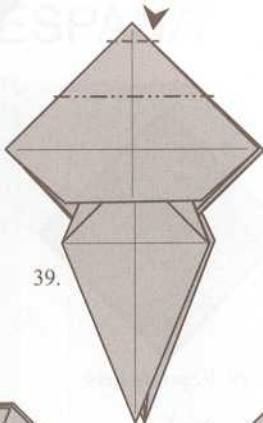
36.



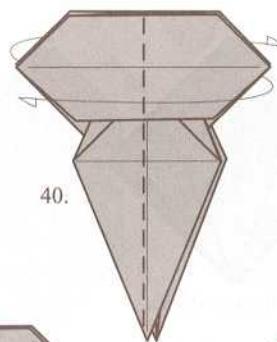
37.



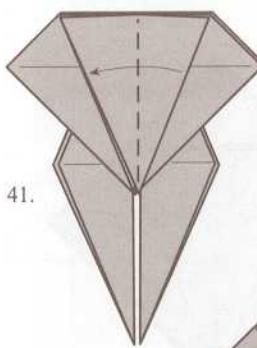
38.



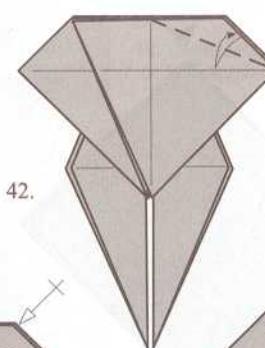
39.



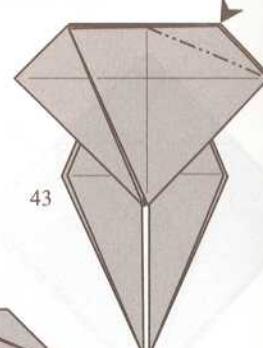
40.



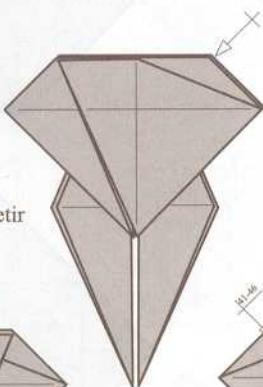
41.



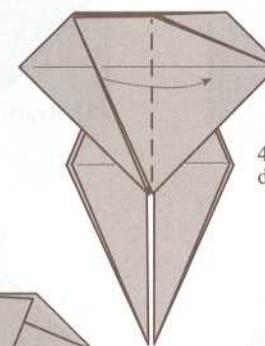
42.



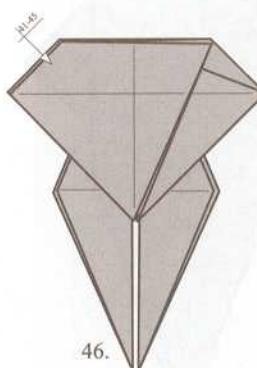
43.



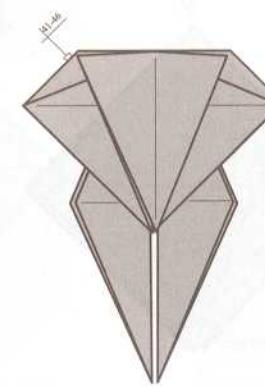
44. Repetir



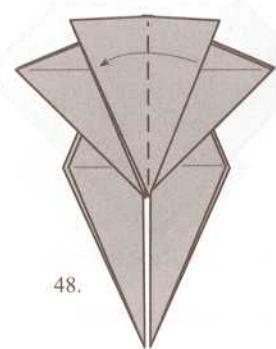
45. Doblar hacia la derecha las dos puntas



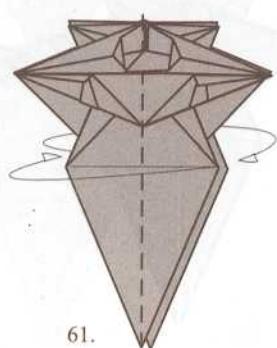
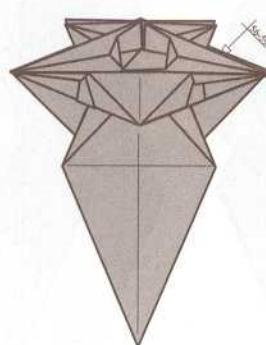
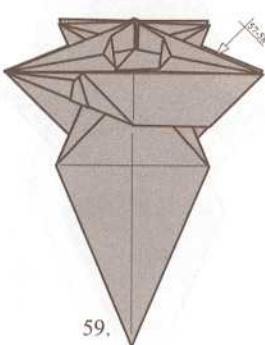
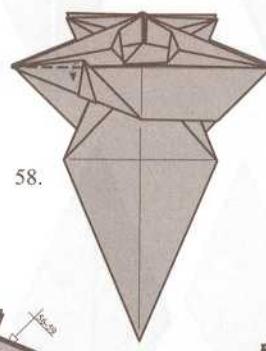
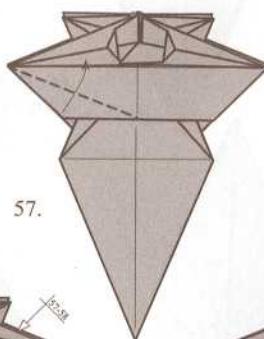
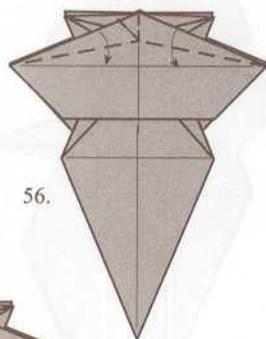
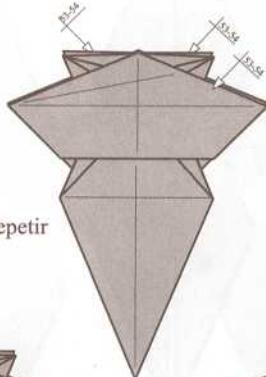
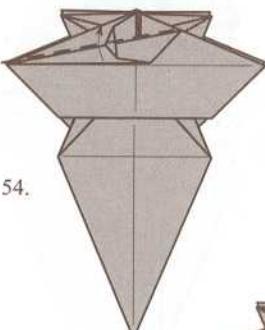
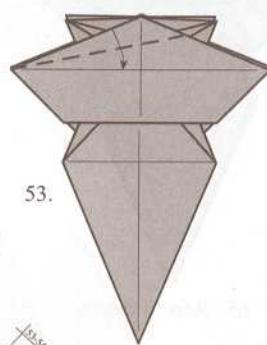
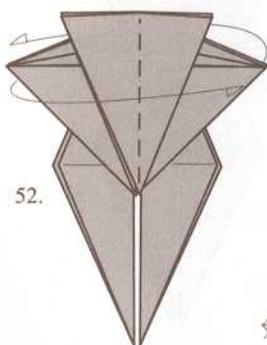
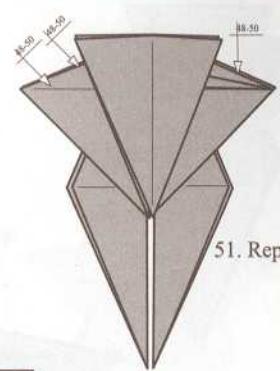
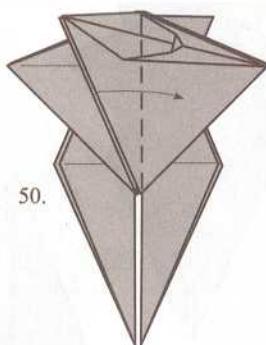
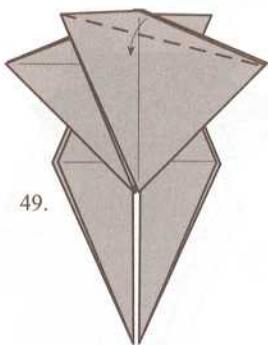
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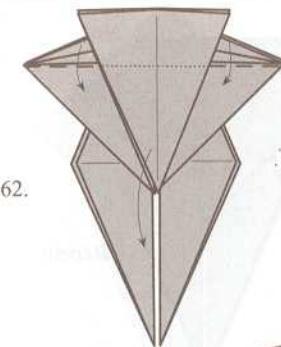


47. Repetir detrás

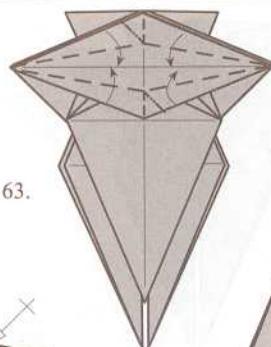


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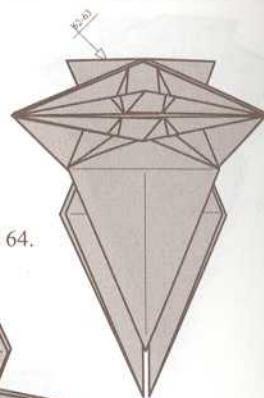




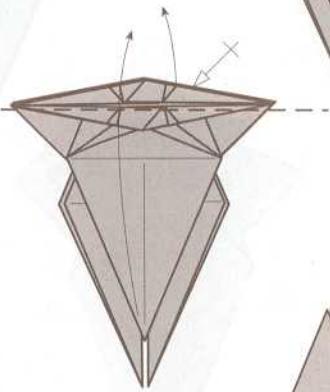
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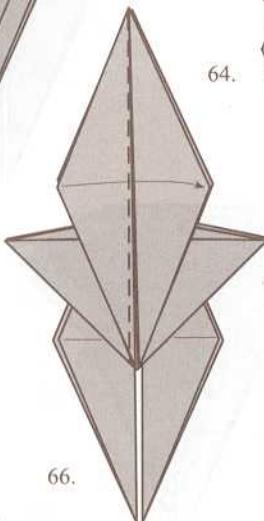
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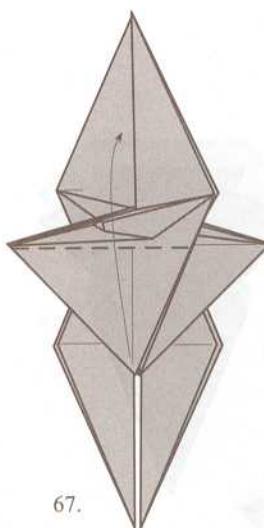
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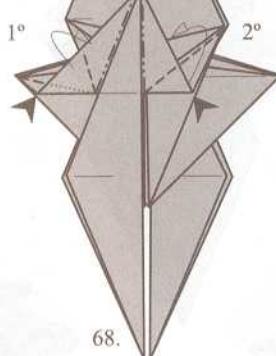
65. Repetir detrás



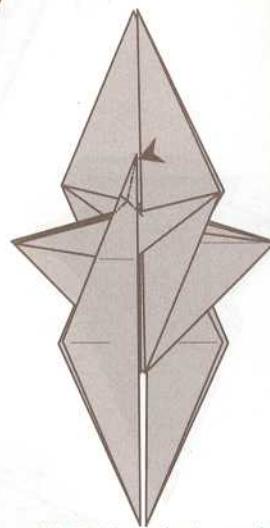
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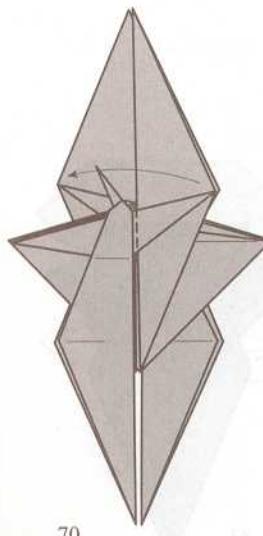
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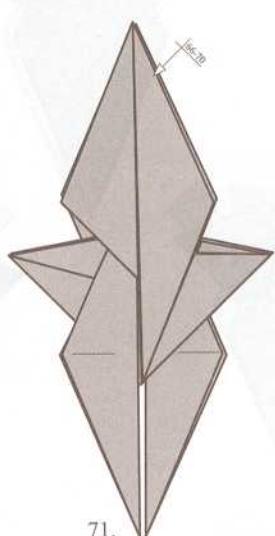
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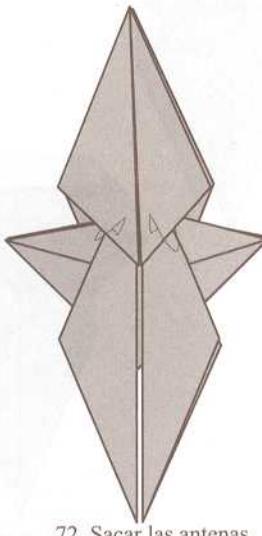
69. Doble oreja de conejo
(dos capas hacia delante)



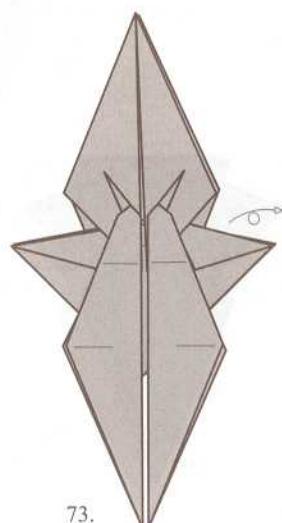
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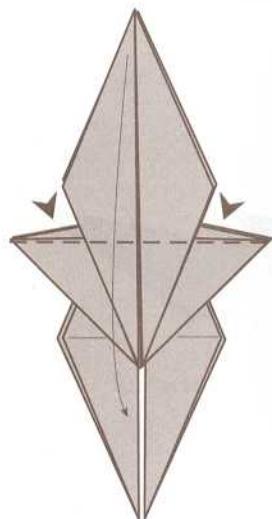
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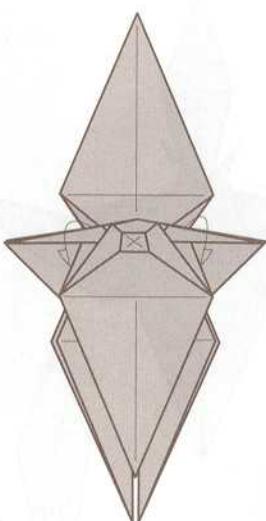
72. Sacar las antenas
hacia delante



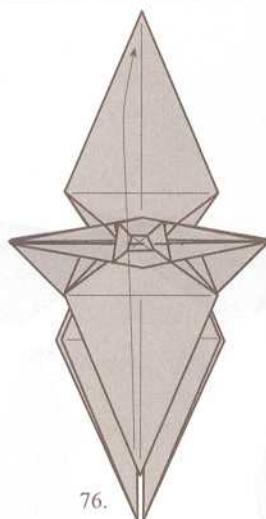
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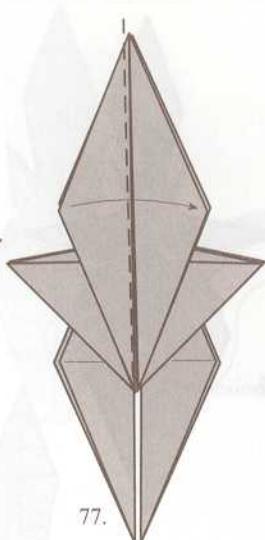
74. Bajar y aplastar el centro



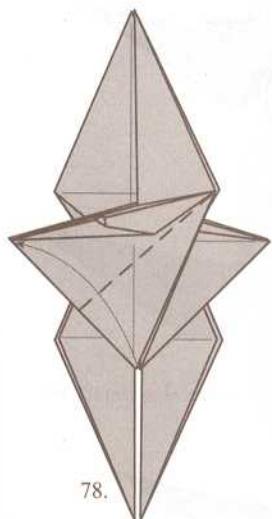
75. Bajar dos capas



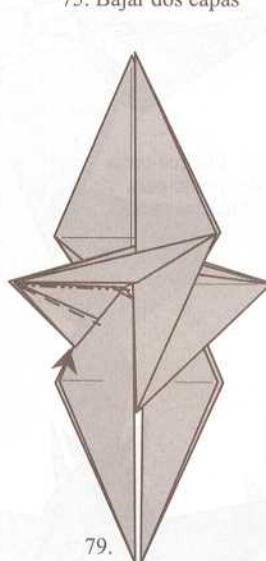
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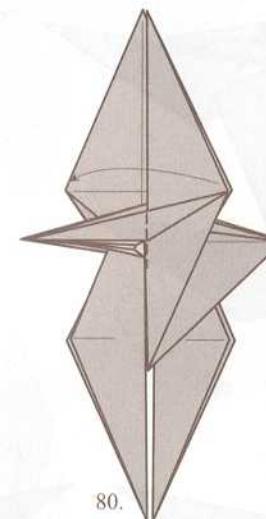
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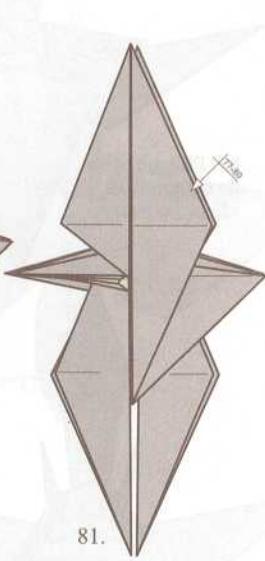
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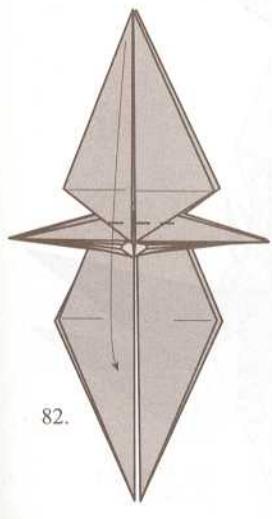
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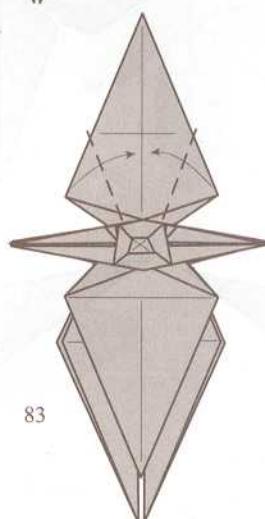
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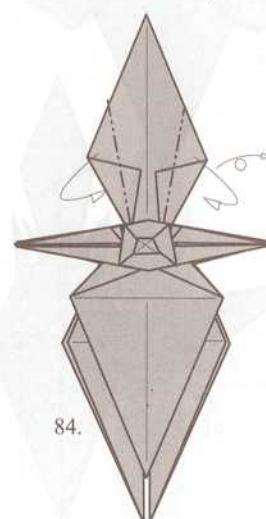
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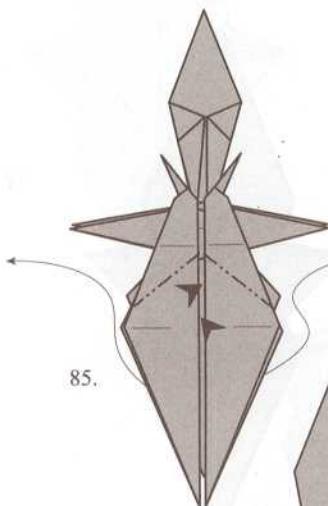
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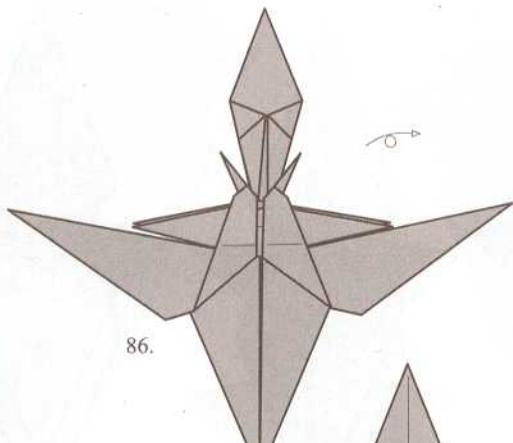
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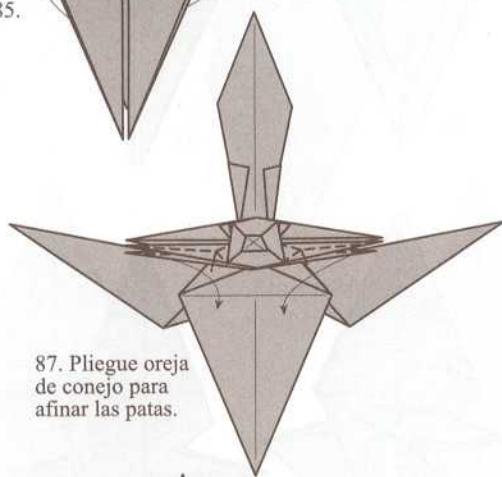
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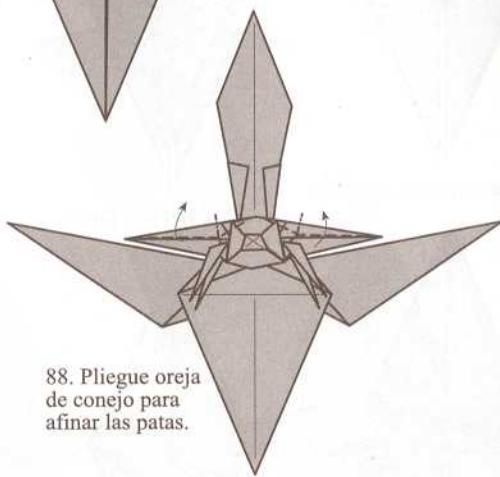
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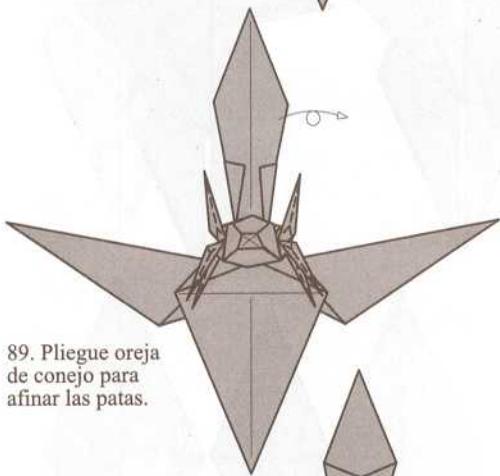
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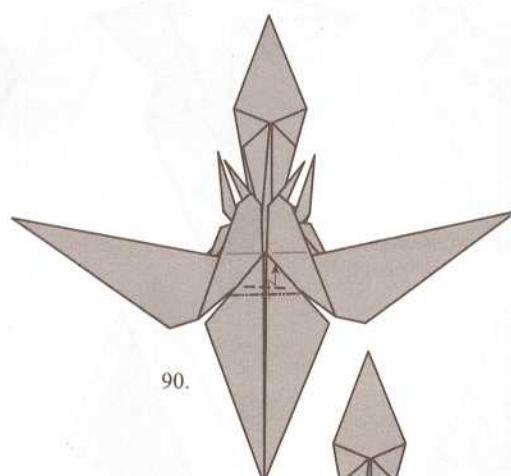
87. Pliegue oreja
de conejo para
afinar las patas.



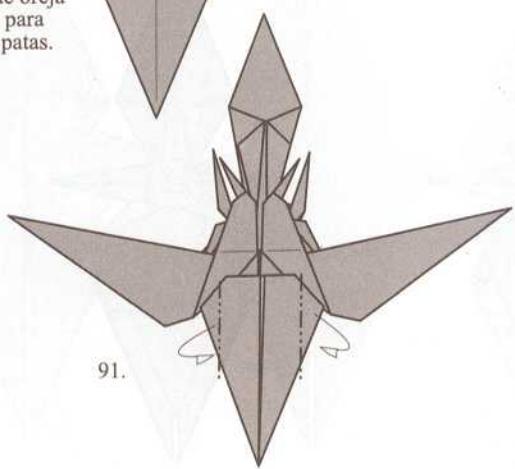
88. Pliegue oreja
de conejo para
afinar las patas.



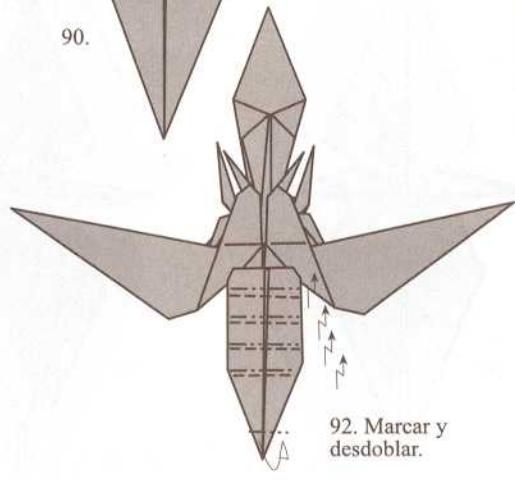
89. Pliegue oreja
de conejo para
afinar las patas.



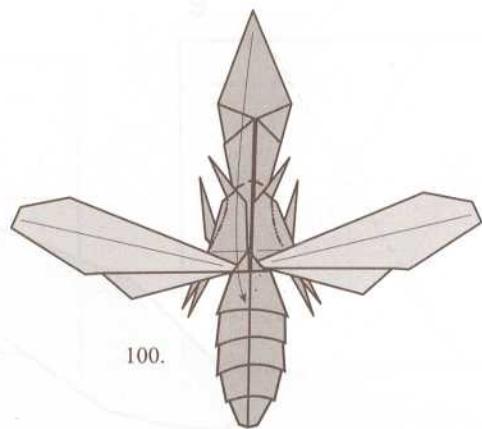
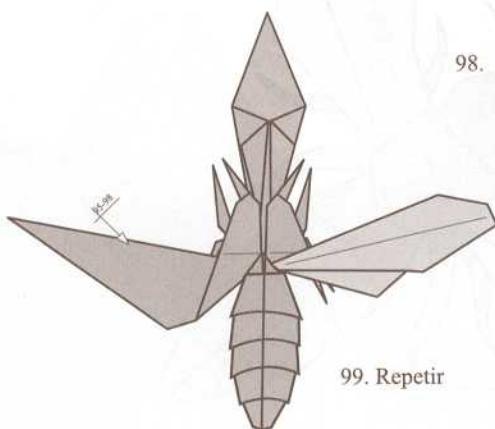
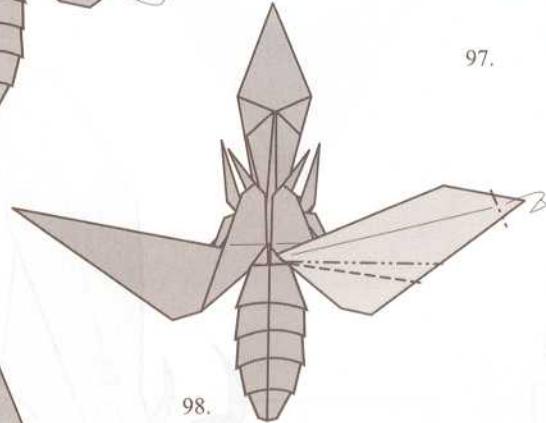
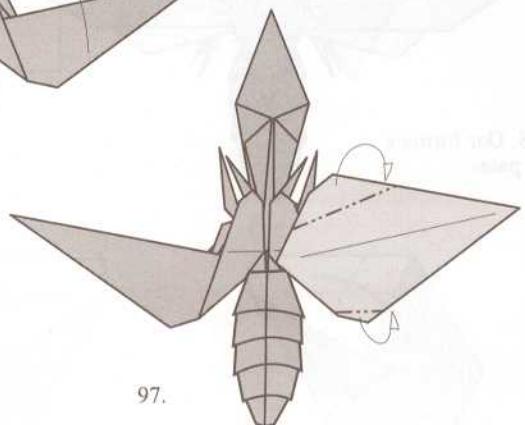
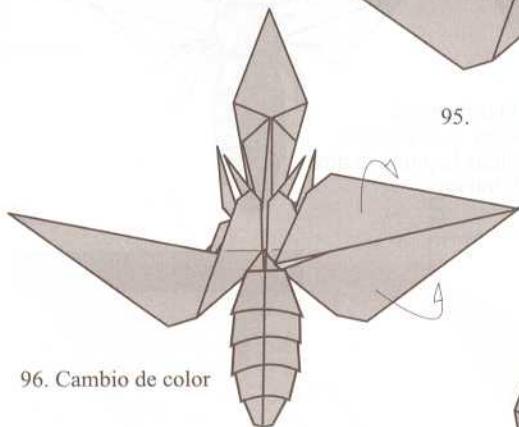
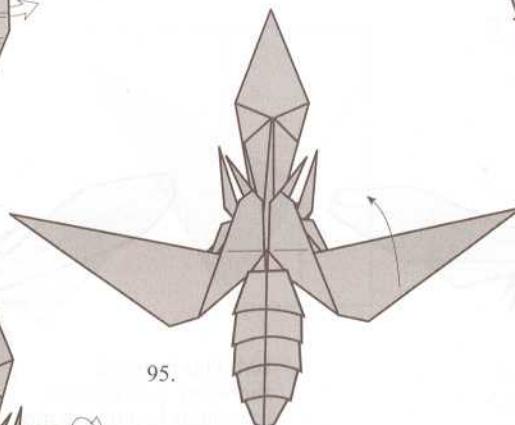
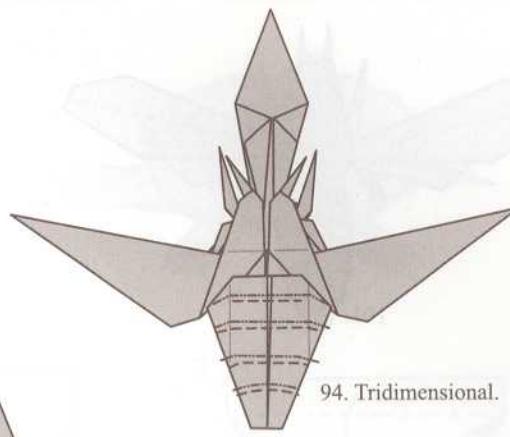
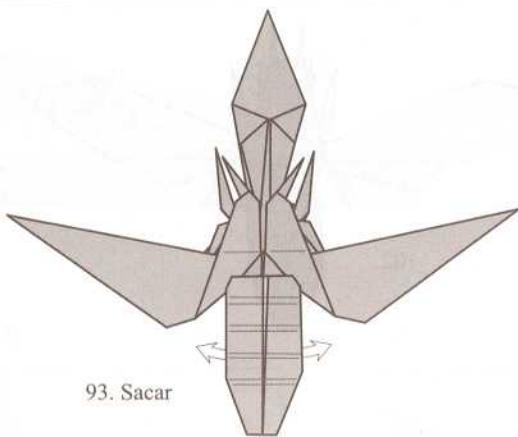
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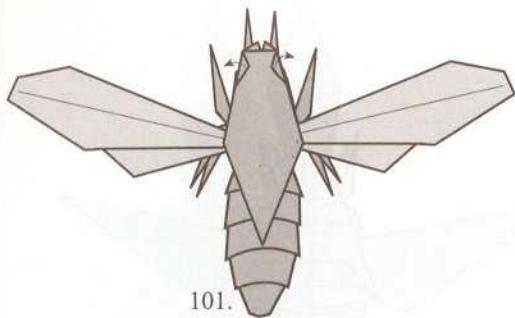


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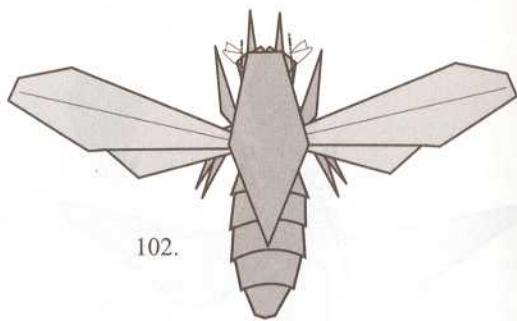


92. Marcar y
desdoblar.

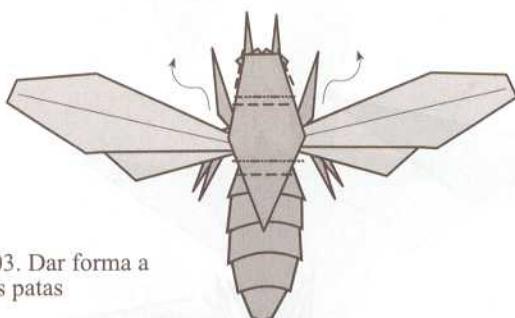




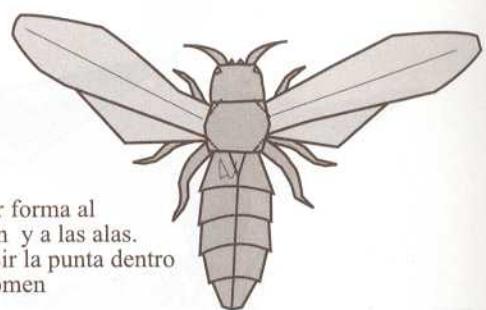
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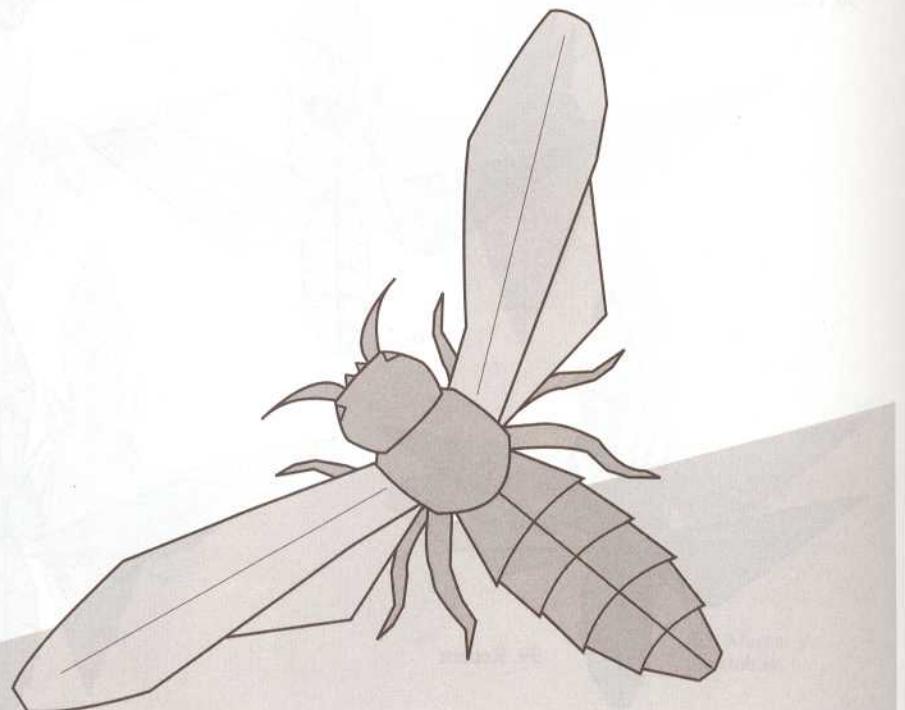
102.



103. Dar forma a
las patas

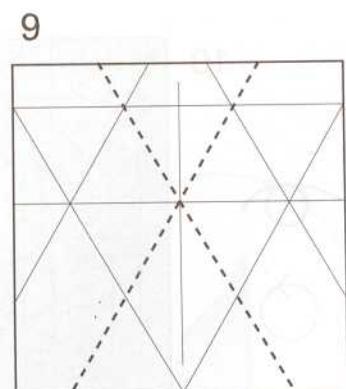
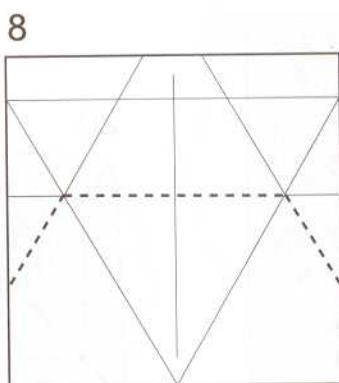
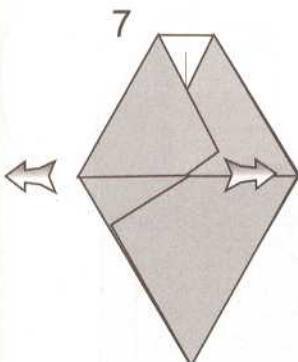
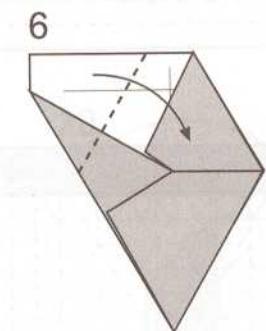
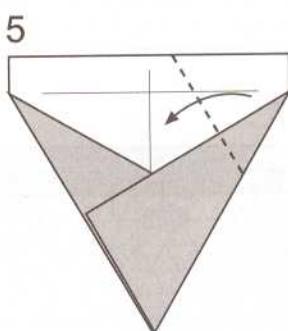
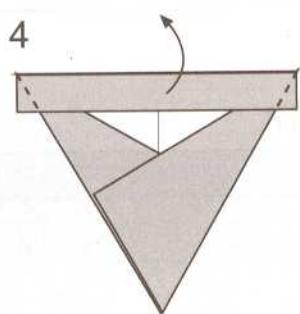
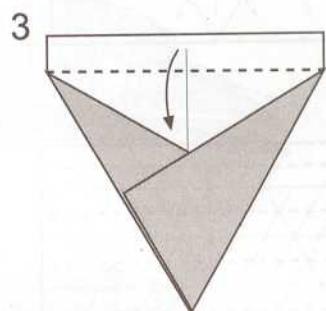
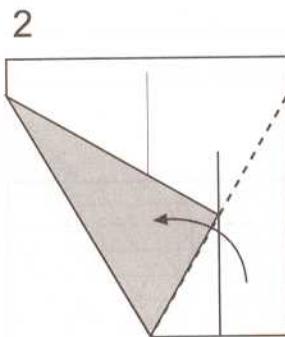
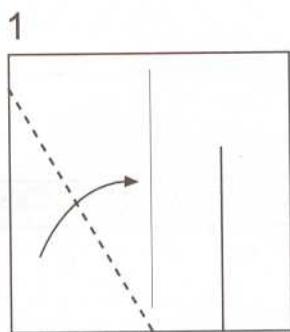
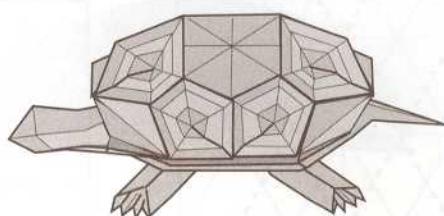


104. Dar forma al
abdomen y a las alas.
Introducir la punta dentro
del abdomen

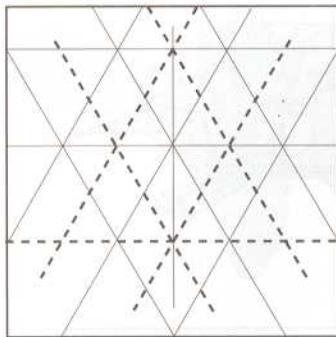


Turtle

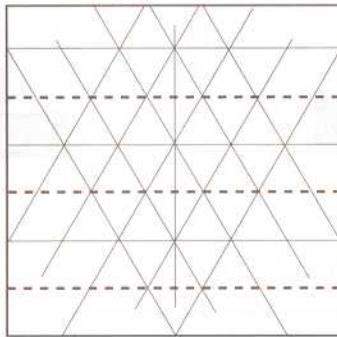
Eran Leiserowitz



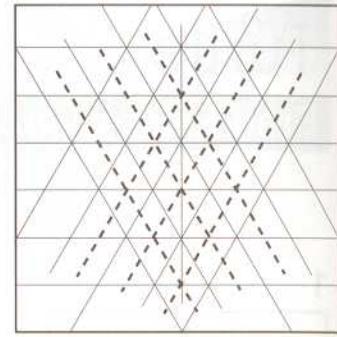
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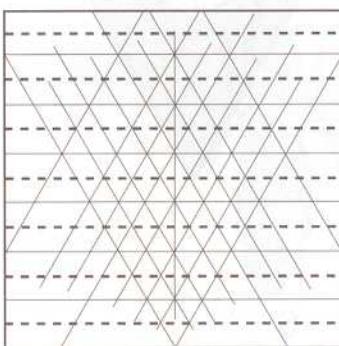
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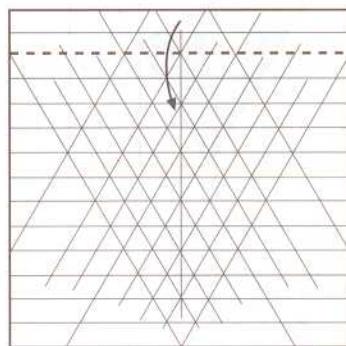
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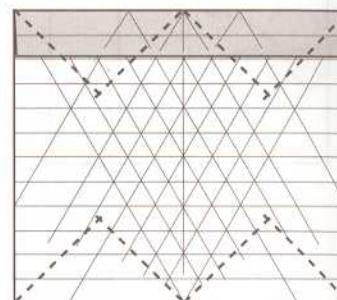
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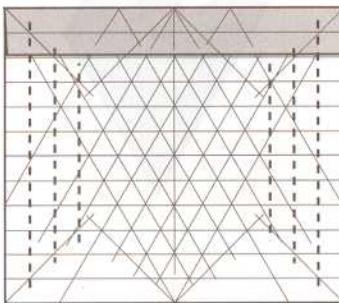
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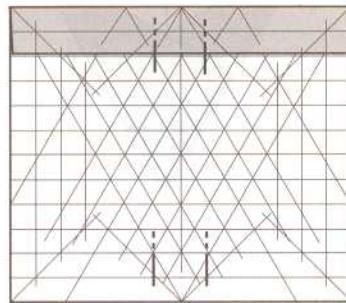
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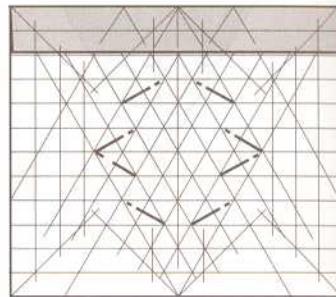
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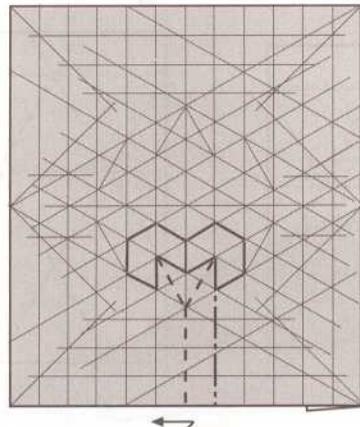
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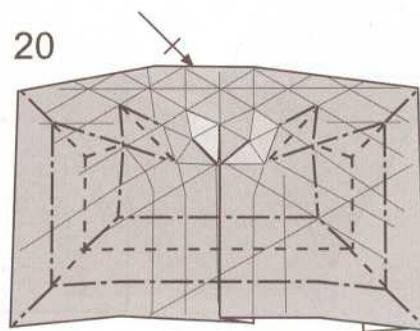
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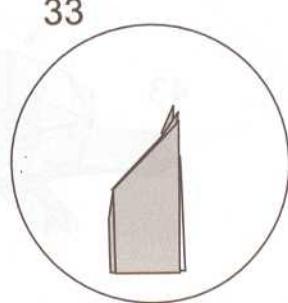
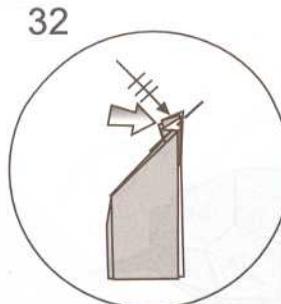
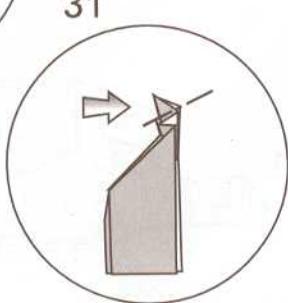
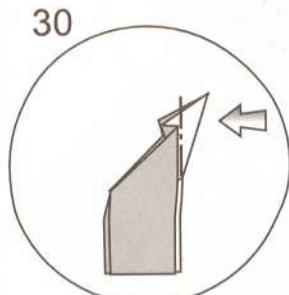
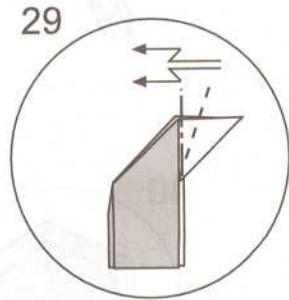
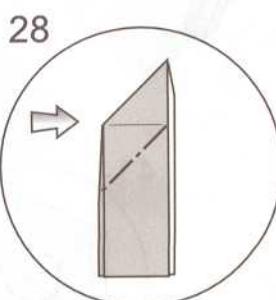
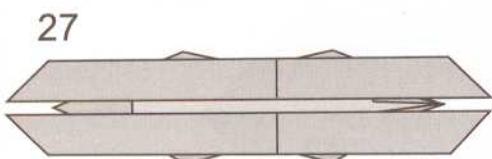
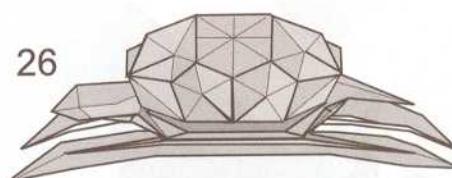
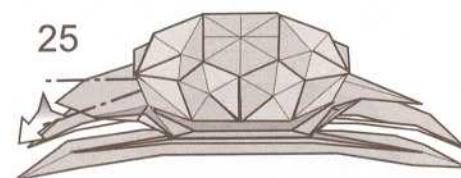
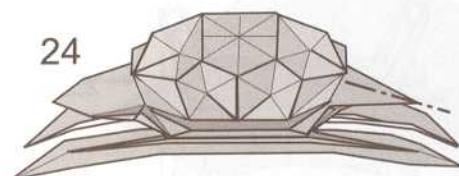
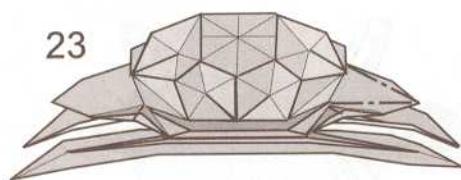
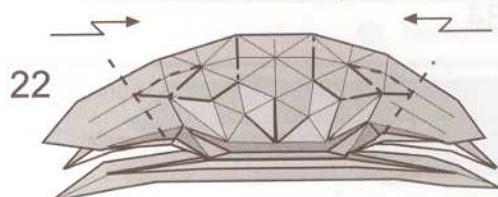
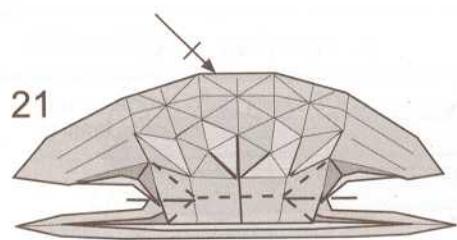


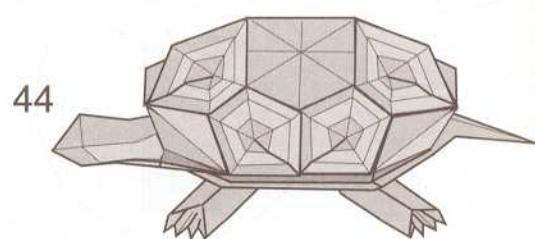
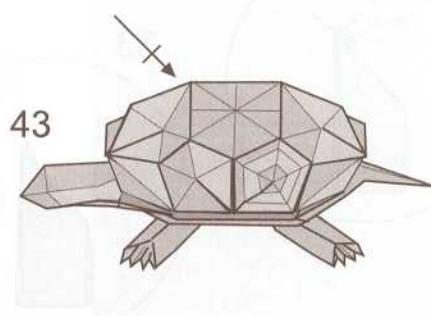
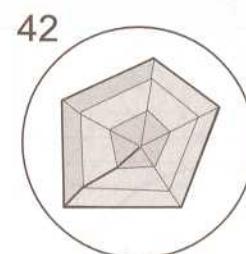
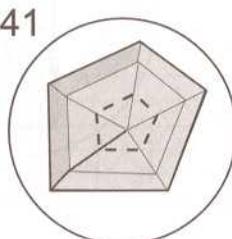
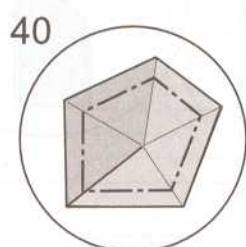
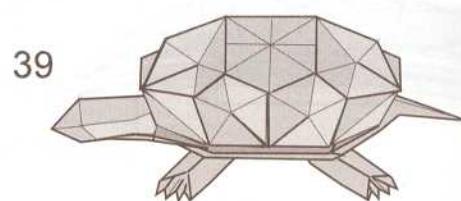
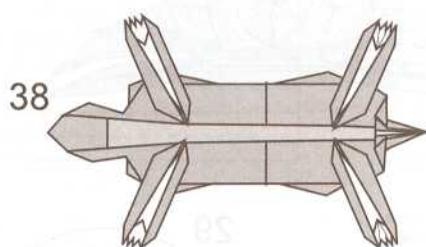
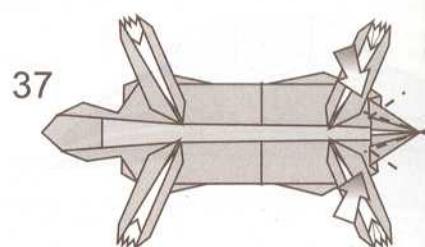
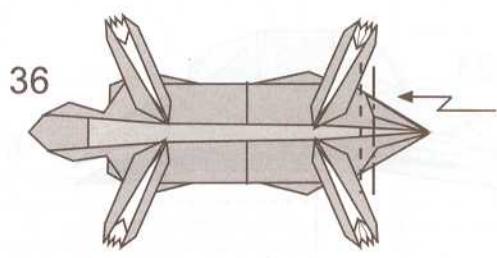
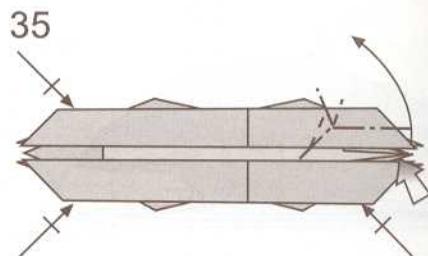
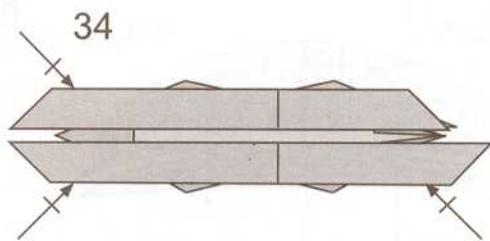
19



20



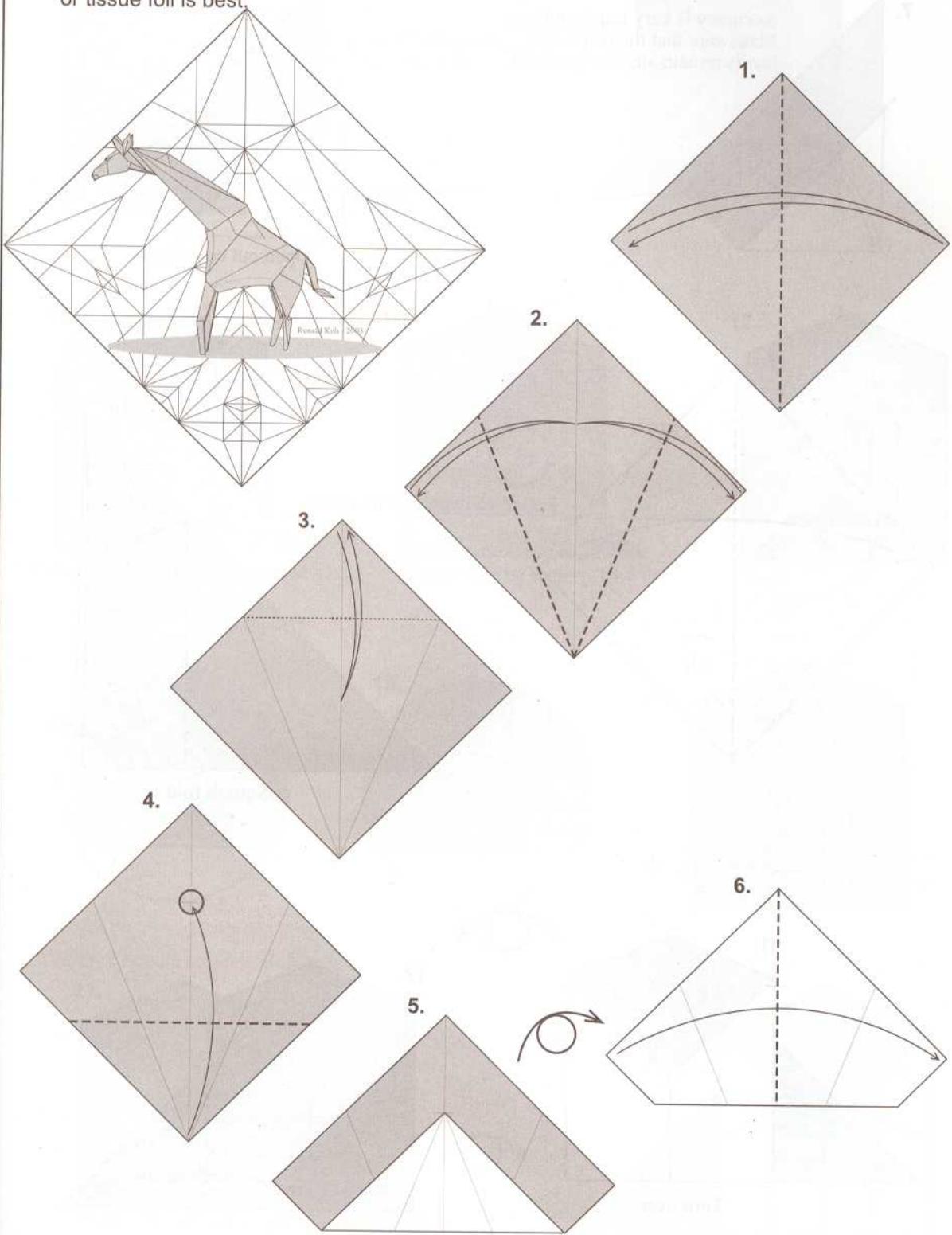


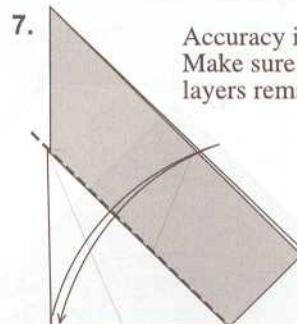


Giraffe (Version 2)

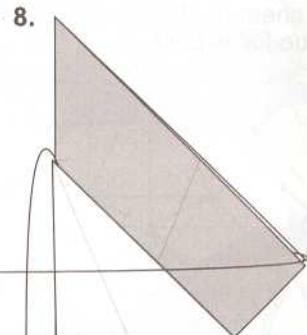
© Ronald Koh - 2003

Use a sheet of at least 30cm square for a 12cm tall model. Kraft paper of about 70gsm or tissue foil is best.

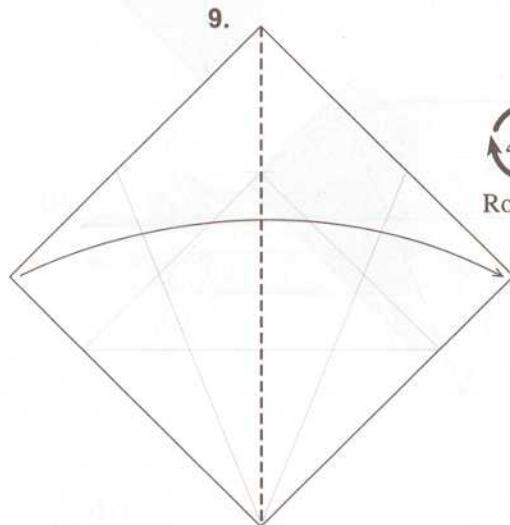




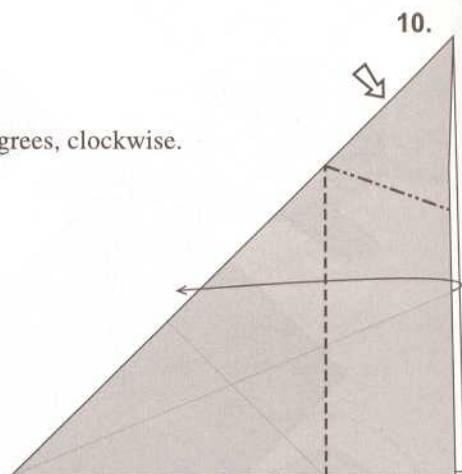
Accuracy is very important here.
Make sure that the respective
layers remain aligned as you fold.



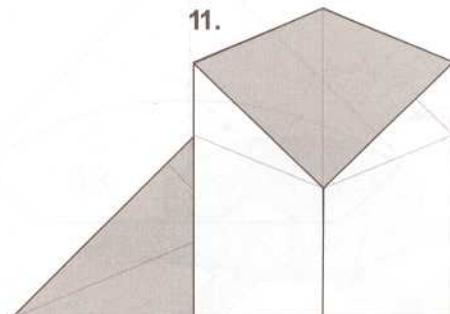
Open out completely.



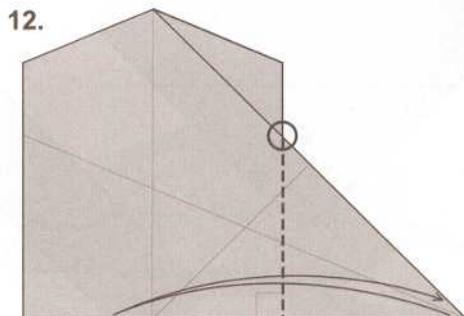
Rotate 45 degrees, clockwise.

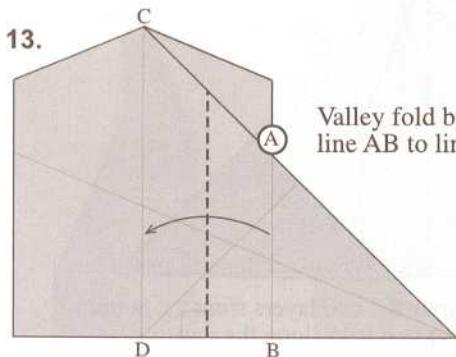


Squash fold

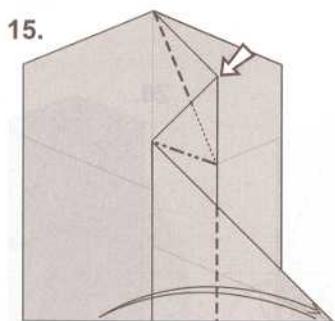
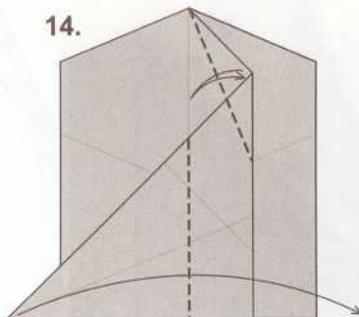


Turn over.

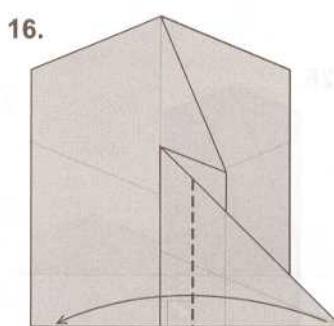




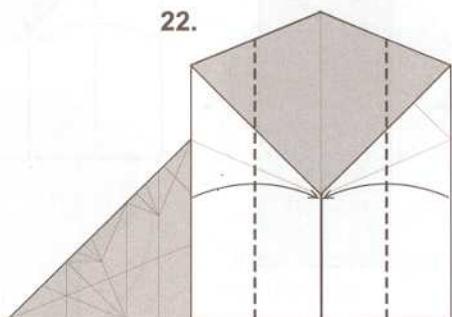
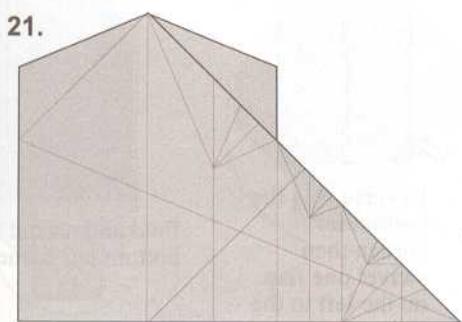
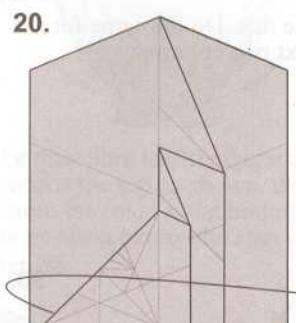
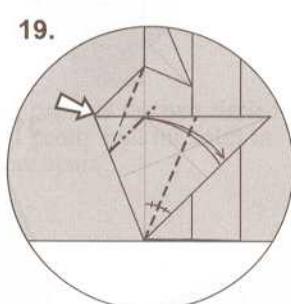
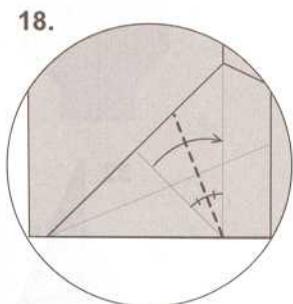
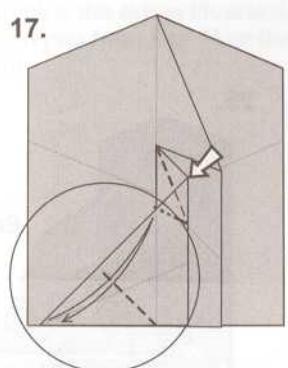
Valley fold by bringing line AB to line CD.

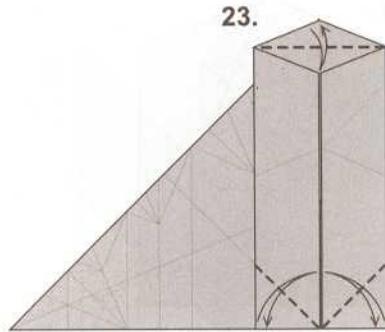


Crimp fold at the top as illustrated.



This is similar to Step 13.

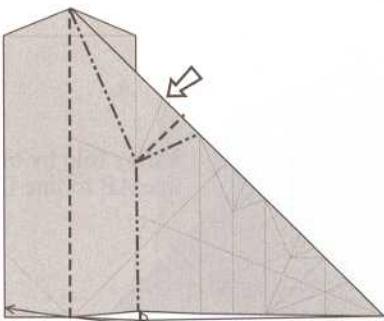




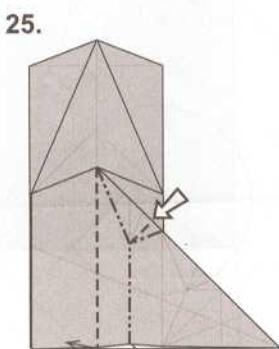
23.



24.

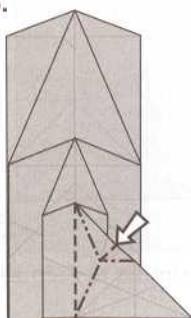


Separate the two layers from the bottom and squash fold along the existing creases lines as shown, ...

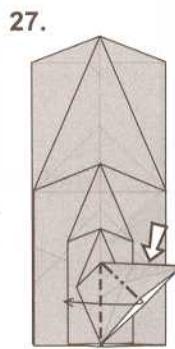


25.

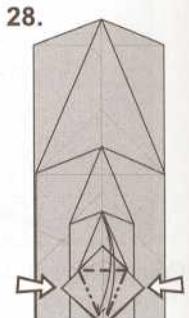
26.



... and so on.

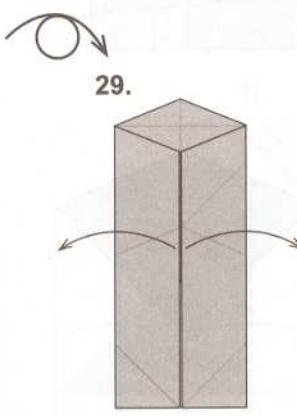


27.

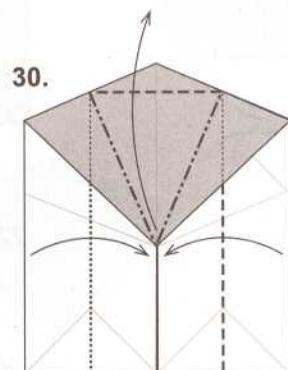


28.

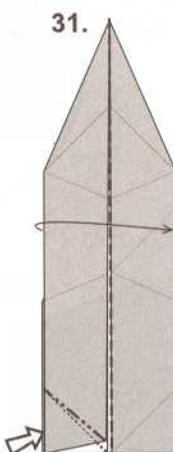
... like this. Do the same for the next two columns, ...



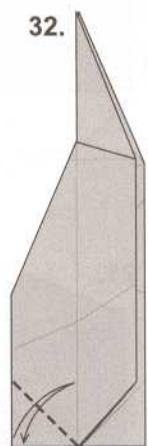
29.



30.



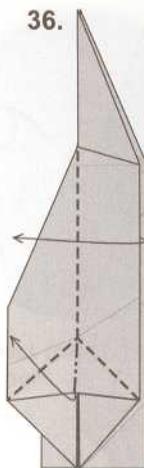
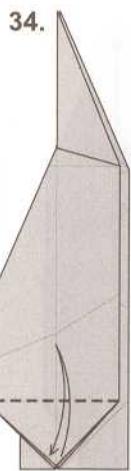
31.



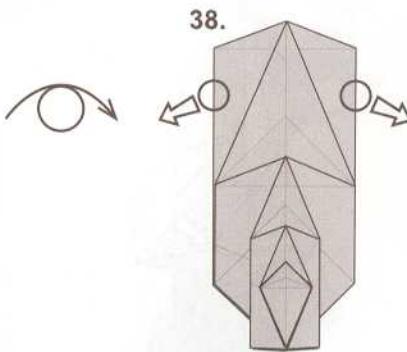
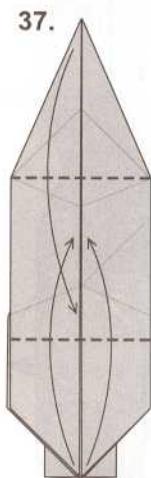
32.

Reverse fold the bottom left corner, then swivel one flap on the left to the right.

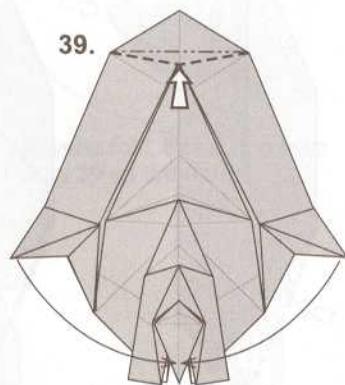
Fold and unfold the bottom left corner, ...



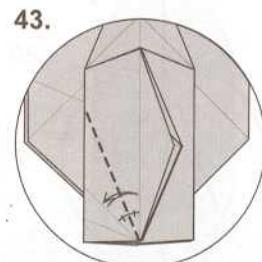
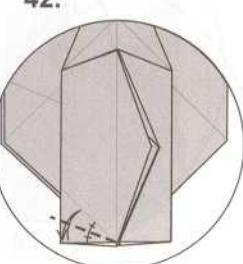
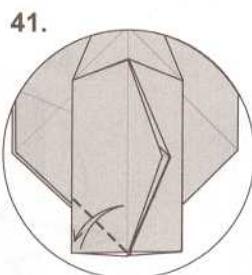
Complete this side as illustrated, then repeat from Step 31 on the right.



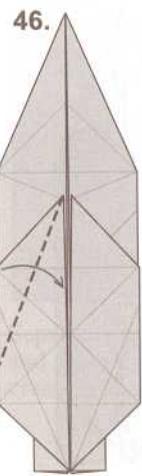
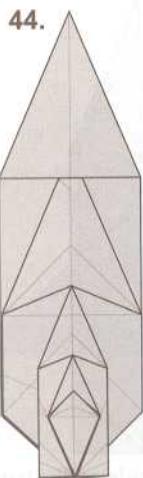
Grasp the paper at the two circled areas and gently pull the folds at the bottom apart, ...



... like this. Sink the triangular area towards the top as shown, then restore the folds at the bottom to the position before the start of Step 38.



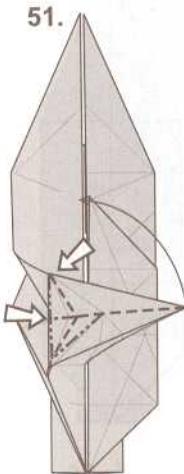
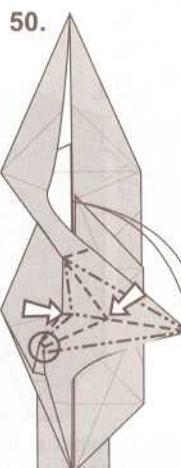
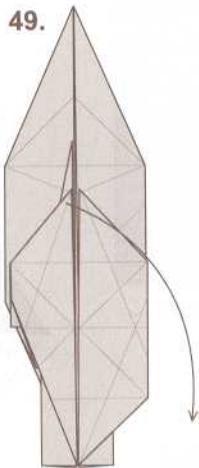
Repeat from Step 40 on the right



Note the little pocket on the left. Unfold and repeat from Step 46 on the right.

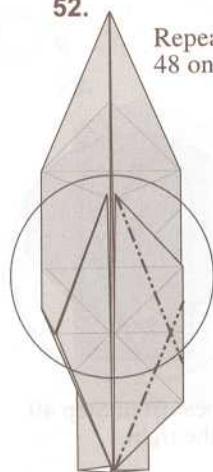


Open sink.

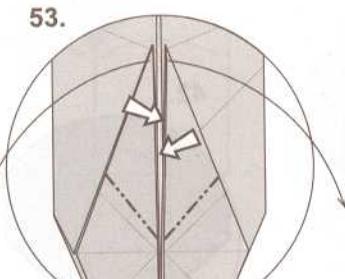


Open sink again. Watch the layers at the circled corners. Fold this point up to flatten the layers, then open up again, ...

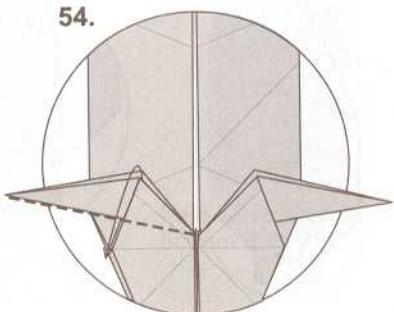
... to reposition the layers as shown, before flatten again.

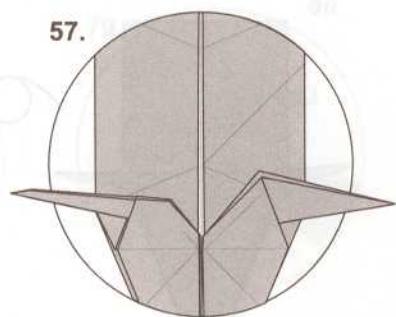
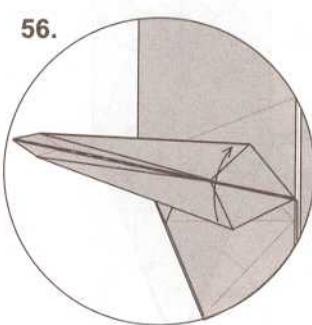
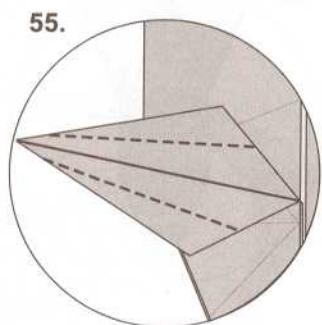


Repeat from Step 48 on the right.

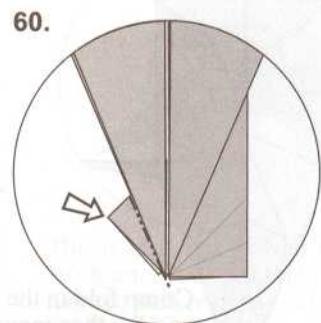
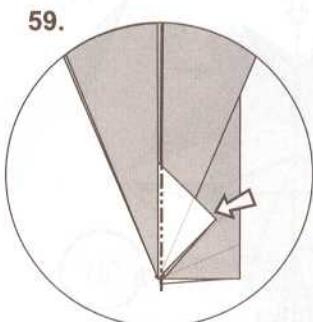
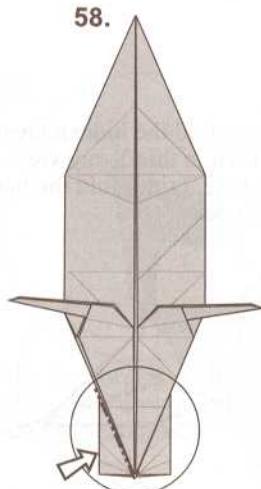


Reverse fold.

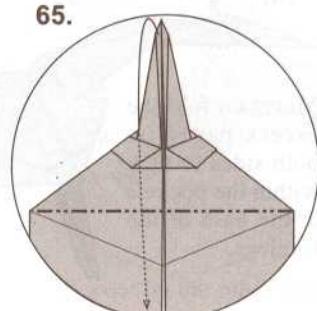
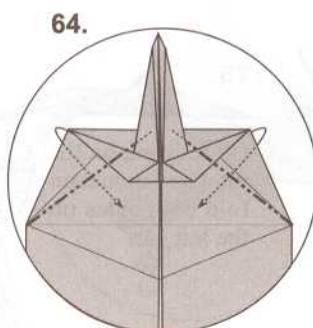
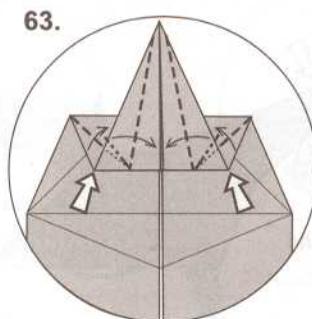
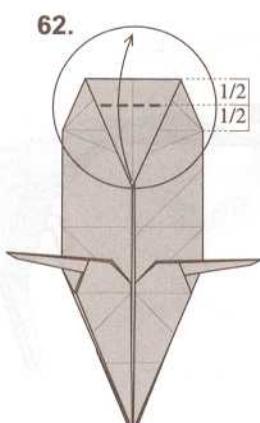
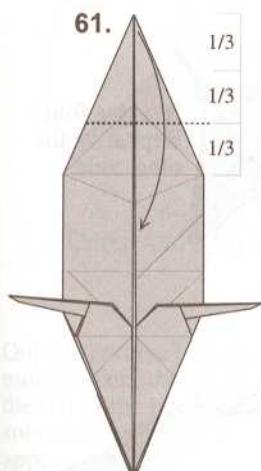


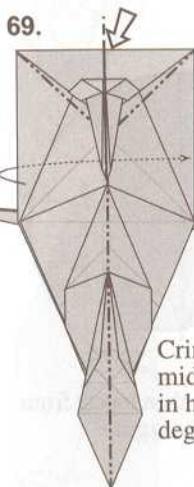
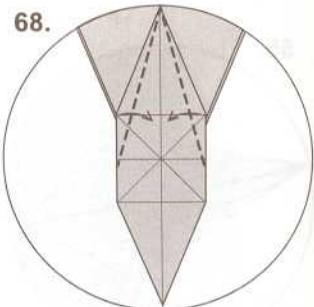
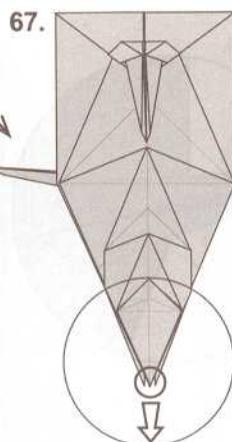
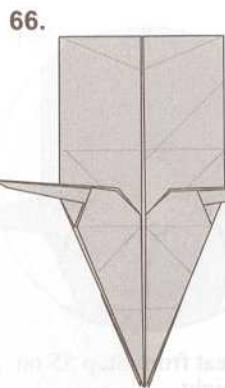


Repeat from Step 55 on the right.

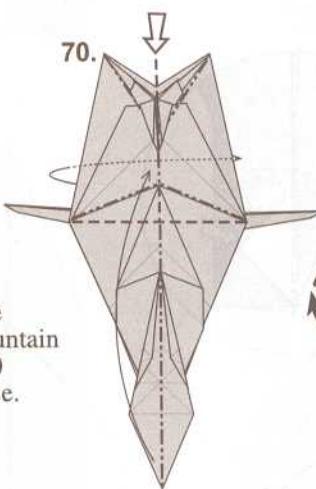


Reverse fold, then repeat from Step 59 on the right.

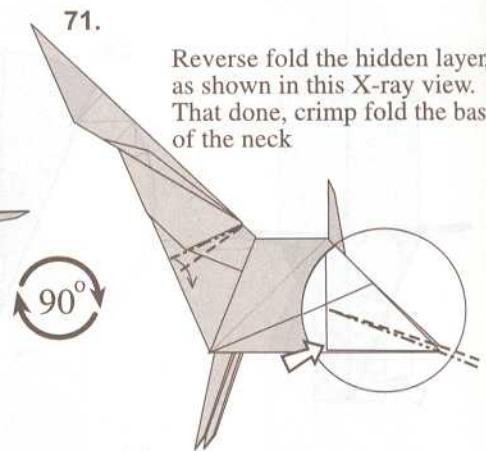




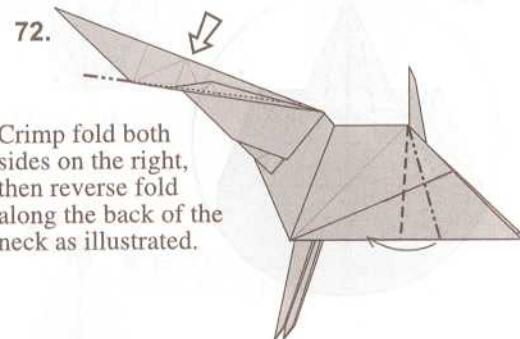
Crimp fold in the middle, then mountain in half. Rotate 90 degrees clockwise.



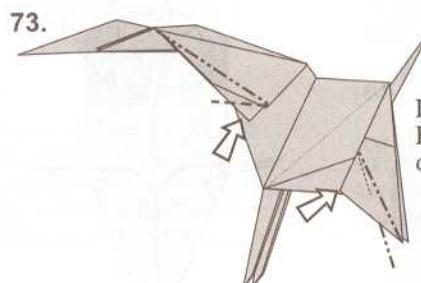
71.



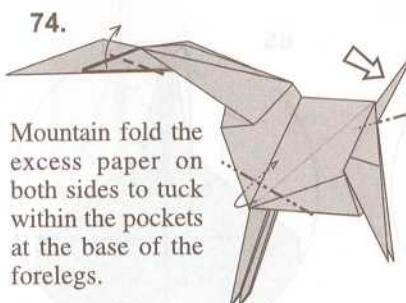
Reverse fold the hidden layer, as shown in this X-ray view. That done, crimp fold the base of the neck



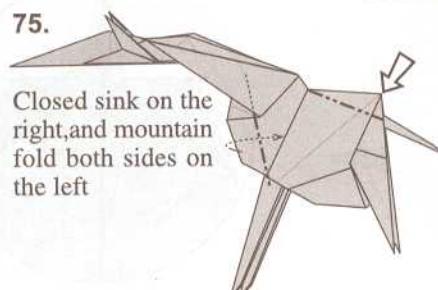
Crimp fold both sides on the right, then reverse fold along the back of the neck as illustrated.



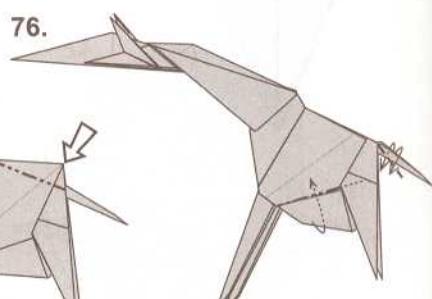
Reverse fold. Repeat on the other side.

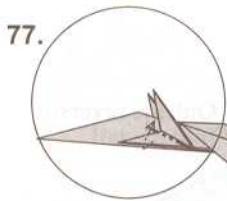


Mountain fold the excess paper on both sides to tuck within the pockets at the base of the forelegs.

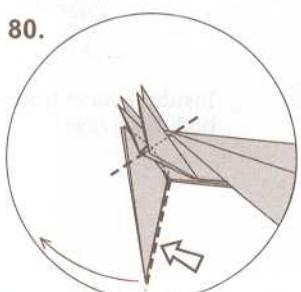
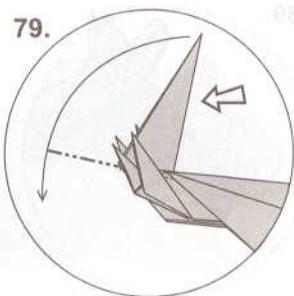
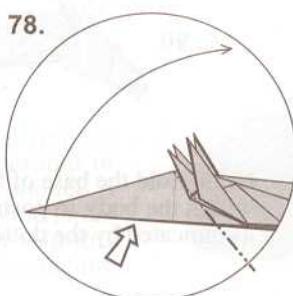


Closed sink on the right, and mountain fold both sides on the left

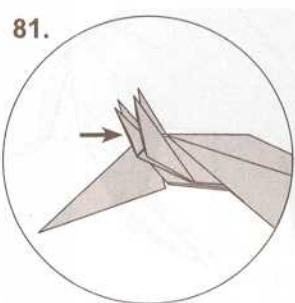




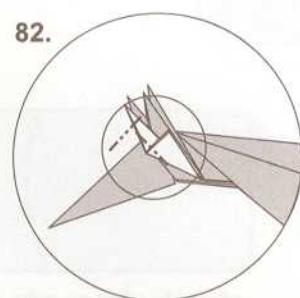
Mountain fold. This should help to keep the layers along the neck together. Repeat on the other side.



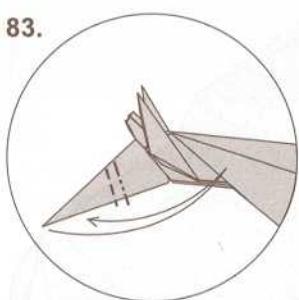
Fold the corners on both sides of the head down, and reverse fold the head piece, ...



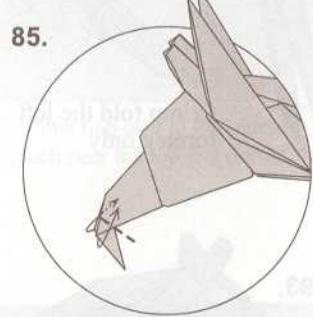
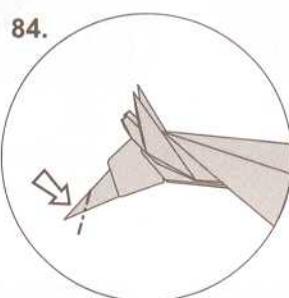
We will now work on the horns, which are the short points sandwiched between the ears.



This is an X-ray view of the left horn. Mountain fold to narrow, then reverse fold the tip. Repeat behind.

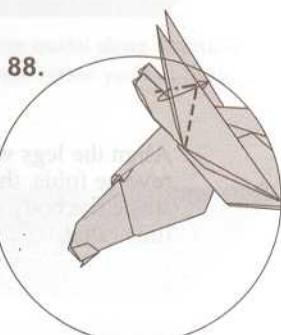
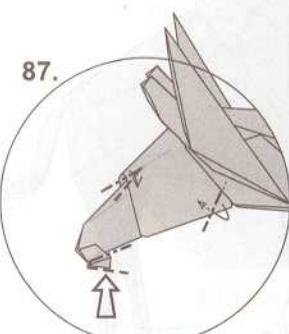
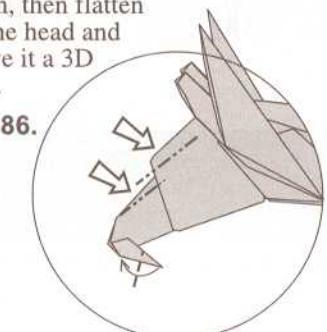


Crimp fold as shown.



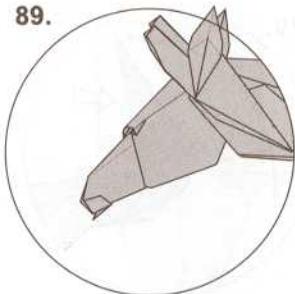
Outside reverse fold.

Outside reverse fold the mouth again, then flatten the top of the head and snout to give it a 3D appearance.



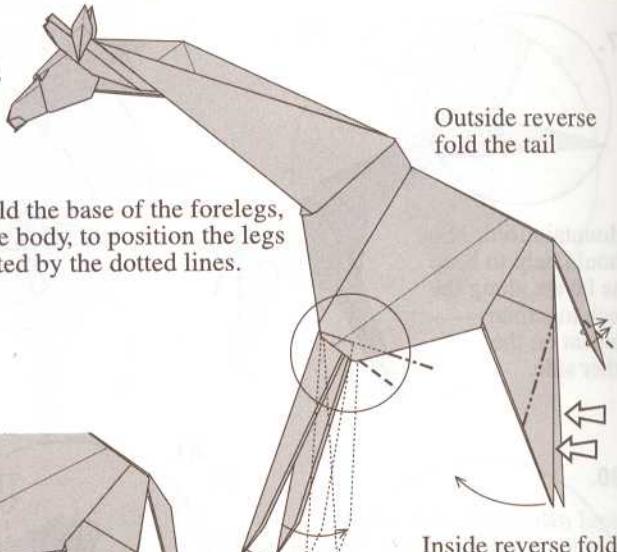
Repeat on the other side

89.



Head done!

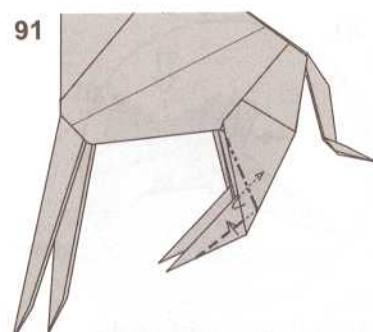
90.



Crimp fold the base of the forelegs, within the body, to position the legs as indicated by the dotted lines.

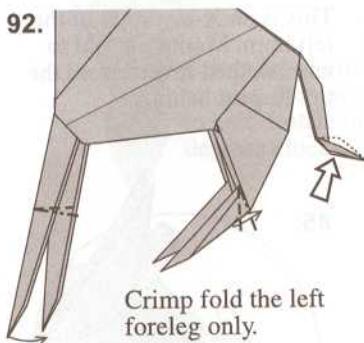
91.

91

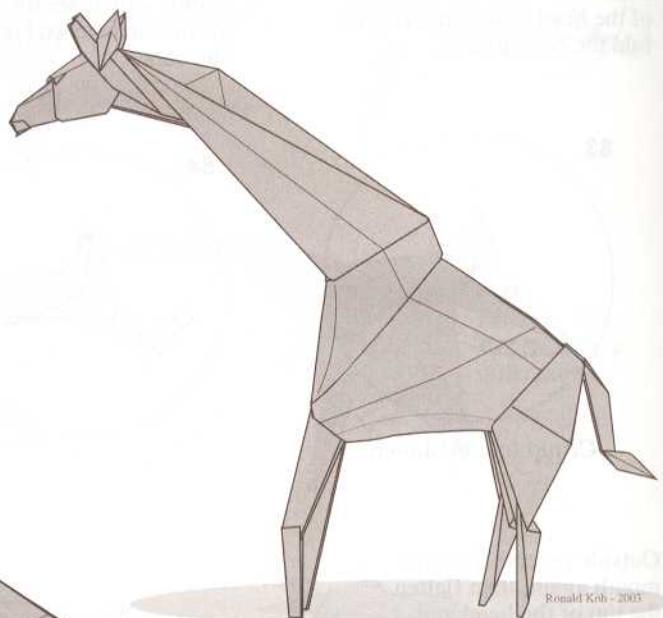


Inside reverse fold both hind legs

92.



Crimp fold the left foreleg only.

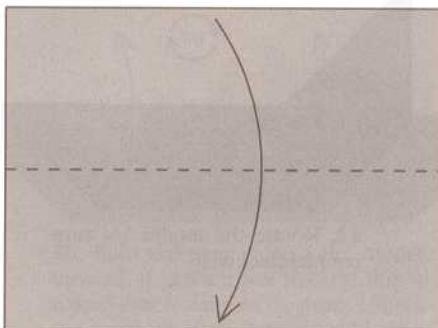
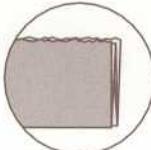
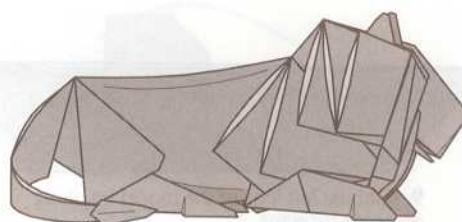


Align the legs with reverse folds, then shape the body as illustrated.

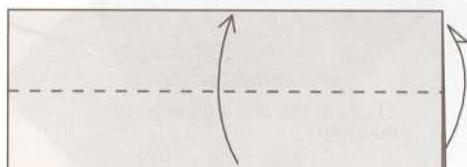
Lion

Designed by Robert J. Lang
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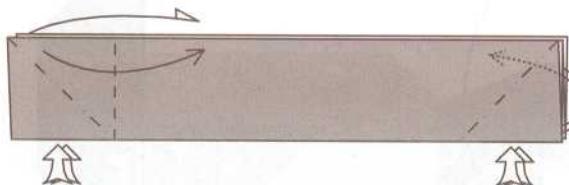
This model is designed to be folded from an untrimmed 3x4 rectangle. Since the proportions of untrimmed rectangles may vary, this model is relatively forgiving of small variations in the initial folding proportions. If you plan to wet-fold this model, fold the paper dry up to step 20, then unfold, dampen, refold, and continue.



1. Begin with the colored side up. Fold the paper in half from top to bottom.



2. Fold the bottom edge up to lie along the top edge. Repeat on the far side. If the edge is rough, it should overlap the top edge slightly as shown in the inset.



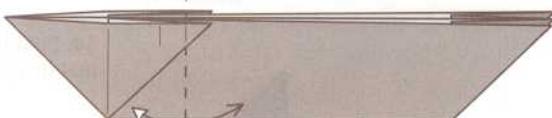
3. Squash-fold the lower left corner; repeat behind. Reverse-fold the lower right corner; repeat behind.



4. Fold the tip of one flap over to the crease; make a small pinch near the top and unfold.



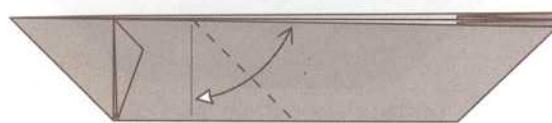
5. Fold the tip of the flap over to the crease you just made; make a small pinch near the top and unfold.



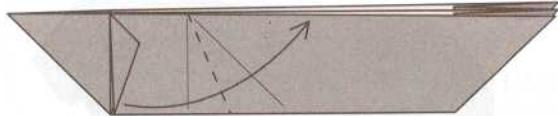
6. Crease through the entire model along a vertical crease that lines up with the crease you just made.



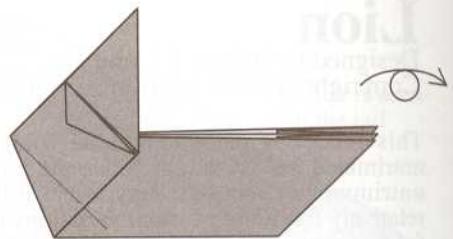
7. Fold a rabbit ear from the near flap. Repeat behind.



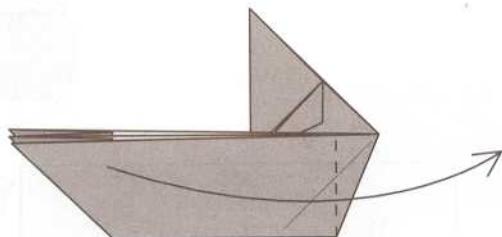
8. Crease lightly along the angle bisector.



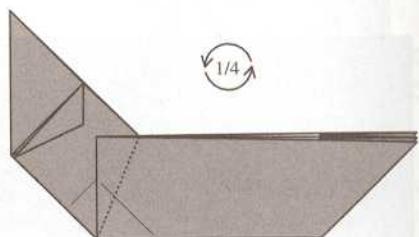
9. Fold the left side of the model up along an angle bisector.



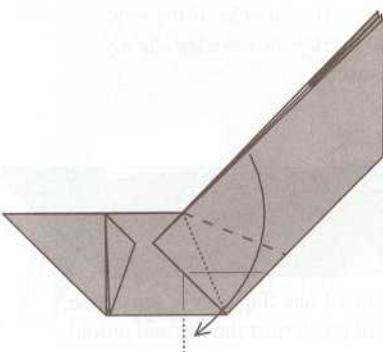
10. Turn the model over from side to side.



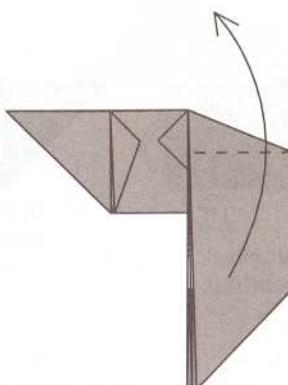
11. Fold the left side over to the right.



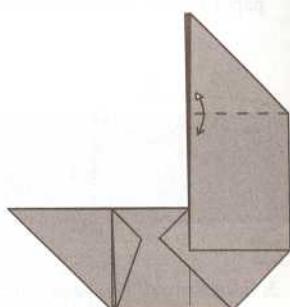
12. Rotate the model 1/4 turn counterclockwise.



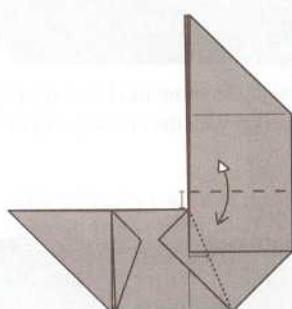
13. Fold the flap back downward so that its edge lines up with the existing vertical crease.



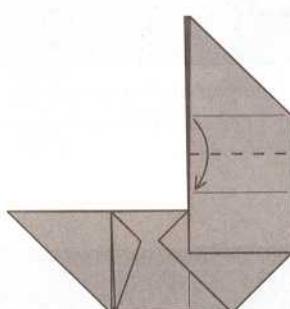
14. Fold the flap back up so that its left edge is vertical.



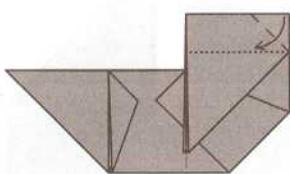
15. Crease lightly through a single layer. Repeat behind.



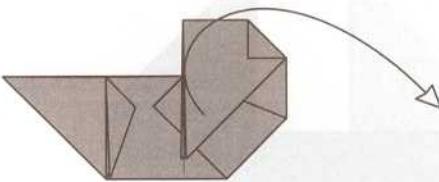
16. Fold and unfold. The exact position of the crease isn't critical, but you can use the distance marked "d" as a guide.



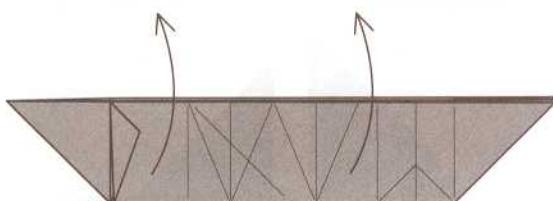
17. Fold the flap down so that the pinch from step 15 lines up with the crease you just made.



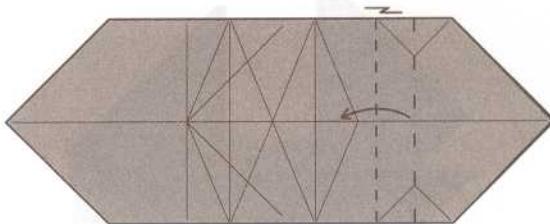
18. Fold the thick corner down so that its edge lies along a horizontal line.



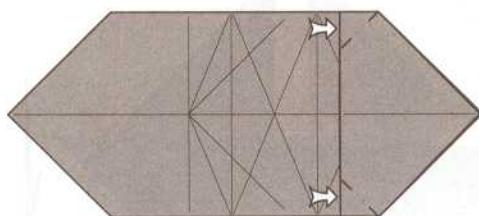
19. Unfold to step 9.



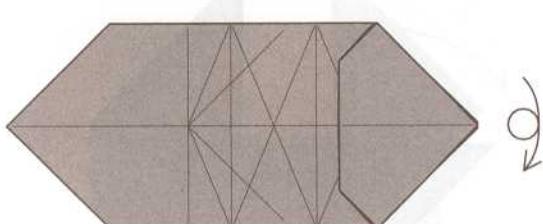
20. Fold the near side of the model upward. If you are wet-folding, this is a good time to dampen the paper. Unfold the paper, dampen it completely, then refold to this step.



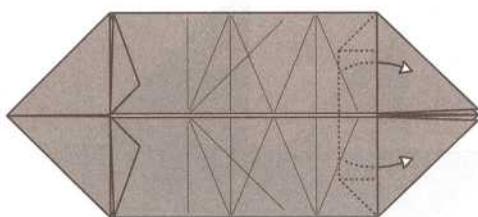
21. Pleat the paper on the existing creases.



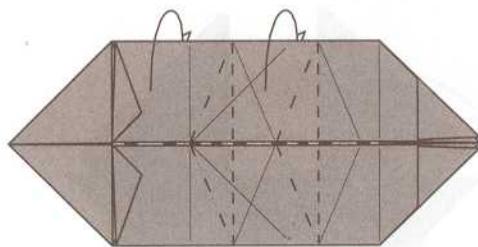
22. Reverse-fold the corners.



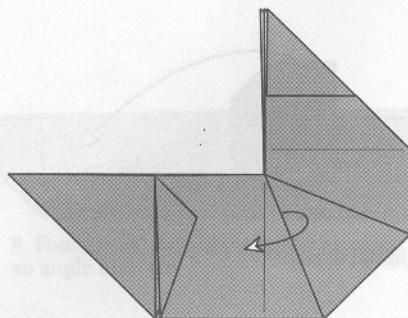
23. Turn over the model from top to bottom.



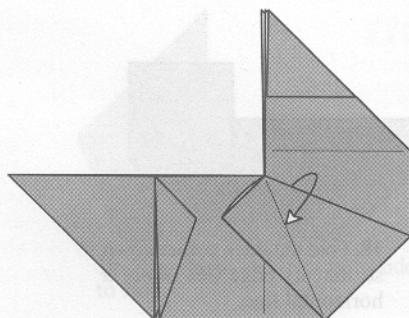
24. Pull out the loose paper.



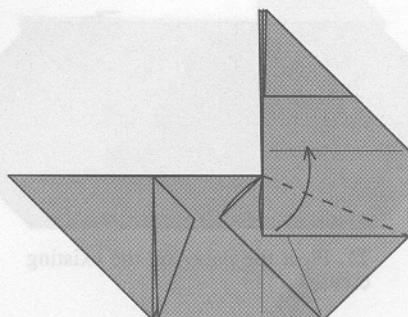
25. Fold the model in half, incorporating the two pleats on the existing creases.



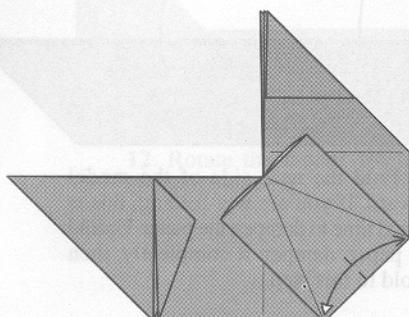
26. Pull out some loose paper. Repeat



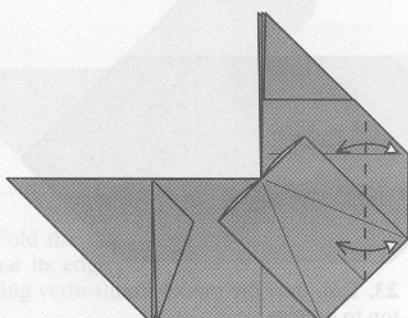
27. Pull out some more loose paper. Repeat behind.



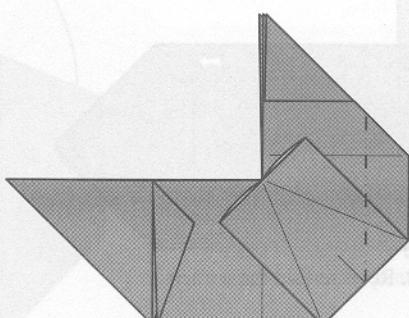
28. Fold one flap up as far as possible. Repeat behind.



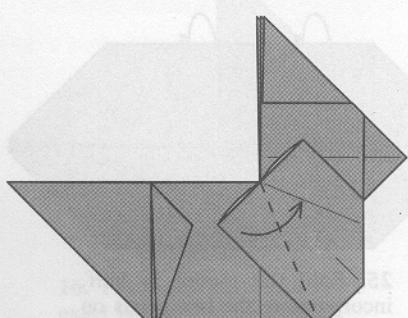
29. Fold and unfold.



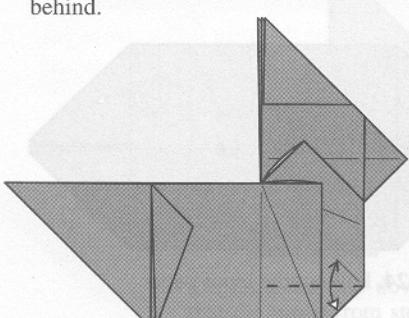
30. Fold and unfold. Repeat behind.



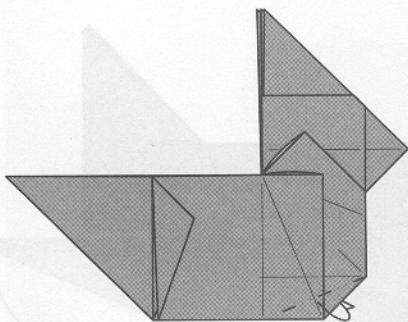
31. Sink the edge. The sink is partially open, partially closed. The edge view shows where the open parts are. Repeat behind.



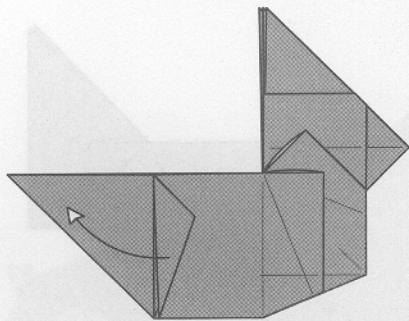
32. Fold one flap upward. Repeat behind.



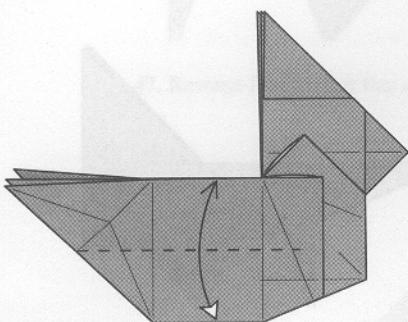
33. Fold and unfold. Repeat behind.



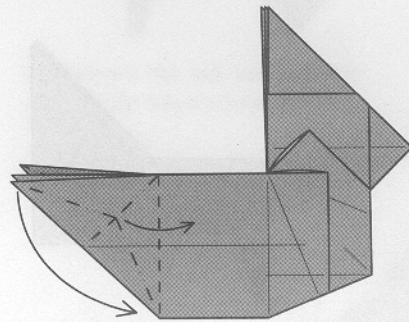
34. Mountain-fold the corner underneath. Repeat behind.



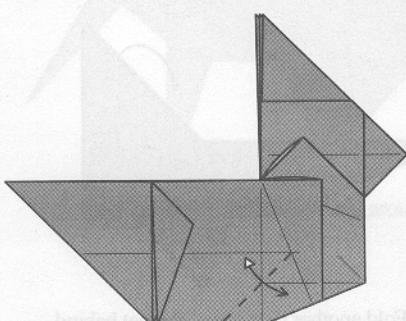
35. Unfold the flap. Repeat behind.



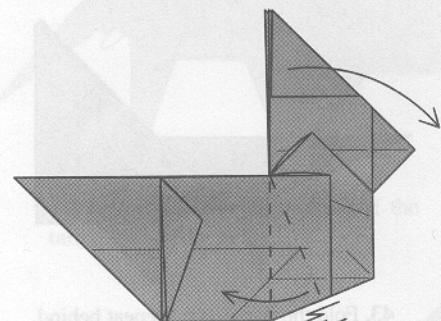
36. Fold the bottom edge up to the top; crease firmly and unfold. Repeat behind.



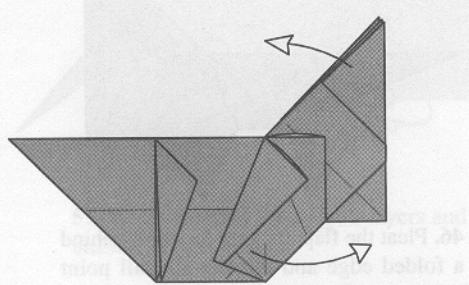
37. Refold the left flap. Repeat behind.



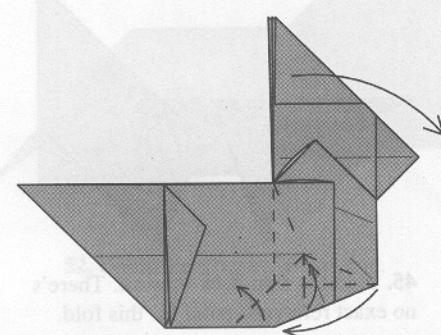
36. Fold and unfold. The crease runs through two crease intersections and is at 45°. Repeat behind.



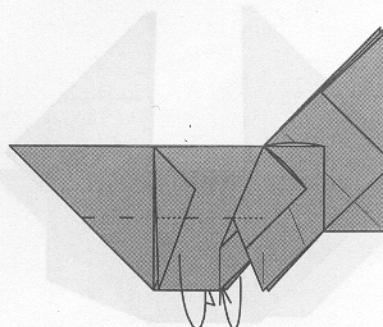
37. Crimp on the existing creases. The top of the model swings over to the right. Flatten firmly.



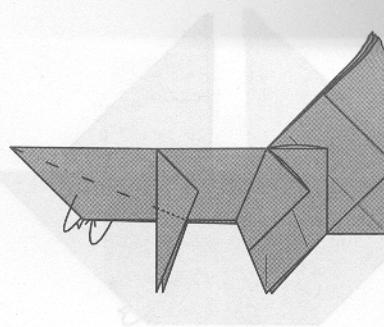
38. Unfold to step 37.



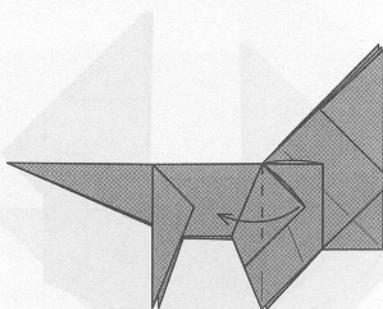
39. Redo the crimp, but incorporating the creases shown, both front and behind.



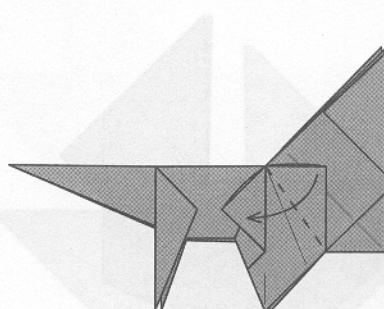
39. Mountain-fold the edges underneath on the existing creases.



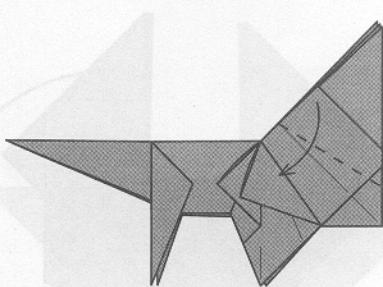
40. Mountain-fold the edges underneath.



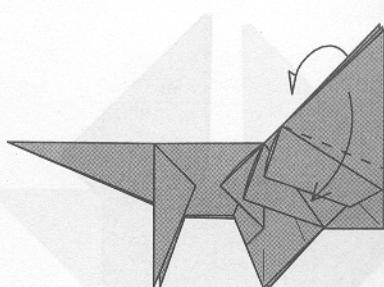
41. Valley-fold the flap to the left. Repeat



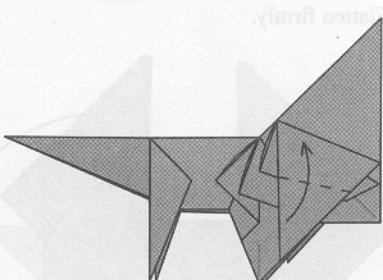
42. Fold the next flap down. Repeat



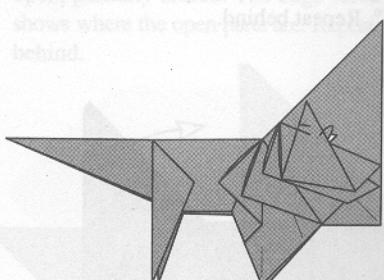
43. Fold the flap down. Repeat behind.



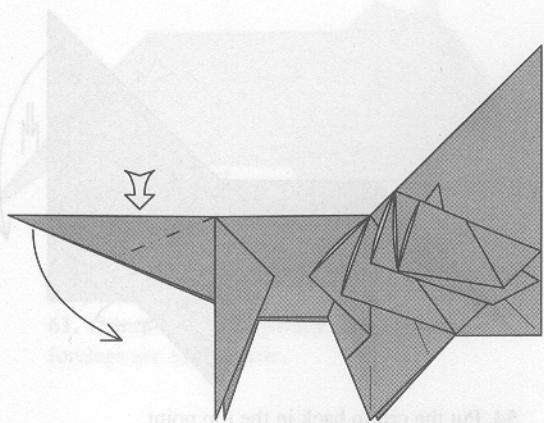
44. Fold another flap down. Repeat behind.



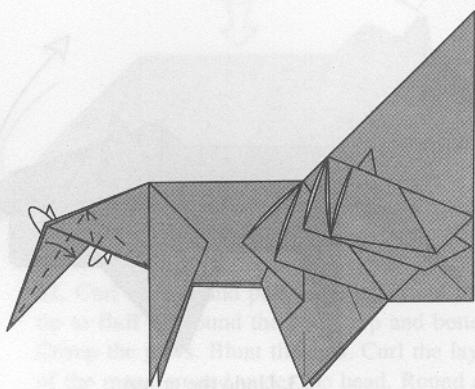
45. Fold the flap back upward. There's no exact reference point for this fold.



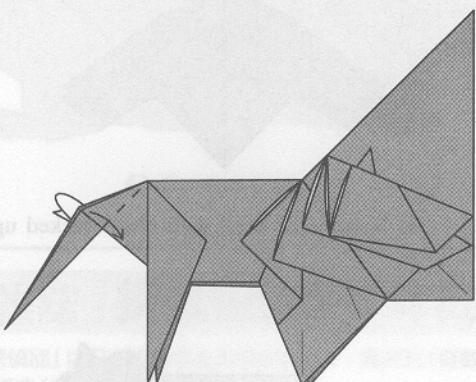
46. Pleat the flap, tucking the pleat behind a folded edge and leaving a small point poking up. Repeat behind.



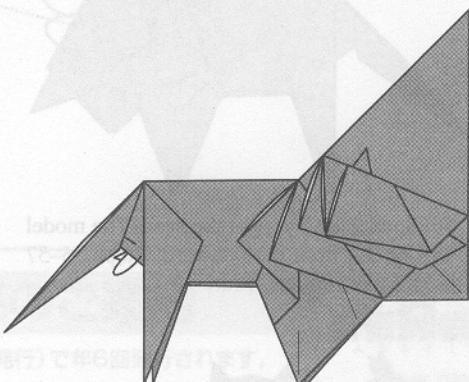
47. Reverse-fold the left flap downward.



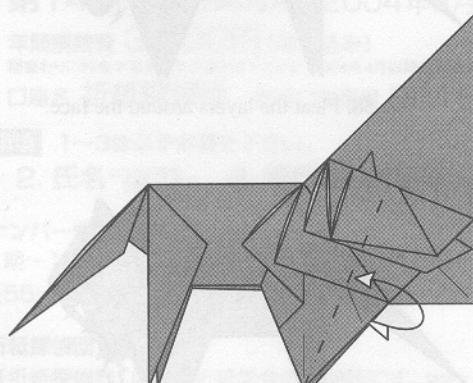
48. Narrow the tail and tuck the edges inside where it joins the body.



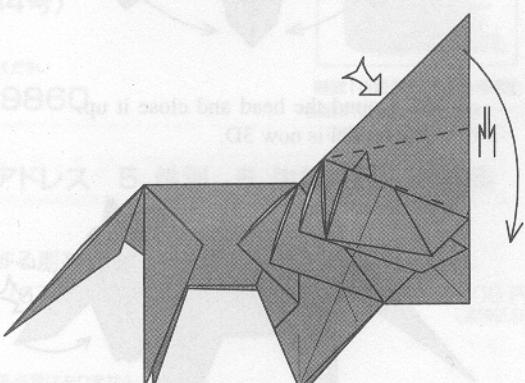
49. Wrap the edges of the tail around.



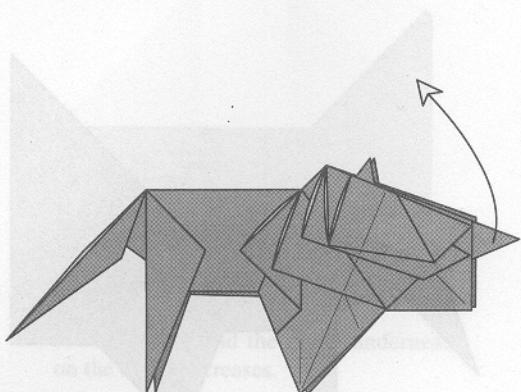
50. Tuck the edges at the base of the tail up inside the model.



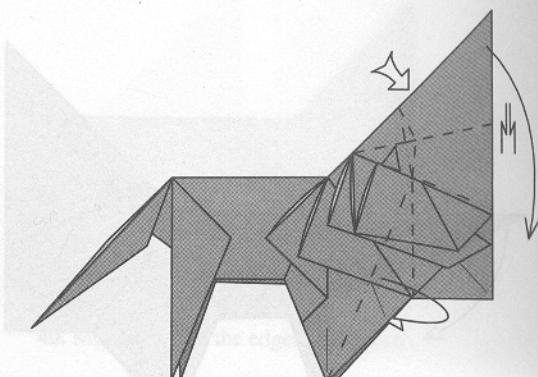
51. Mountain-fold through all layers and unfold. Repeat behind.



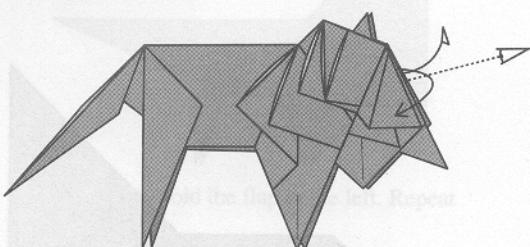
52. Crimp the top point downward.



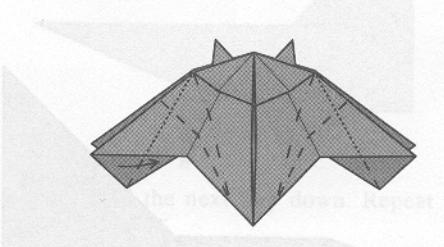
53. Undo the crimp.



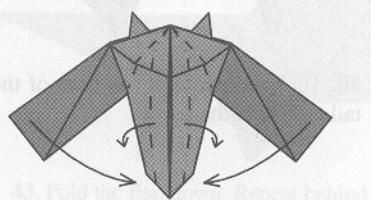
54. Put the crimp back in the top point, but at the same time pleat the forelegs and add some creases to the top crimp.



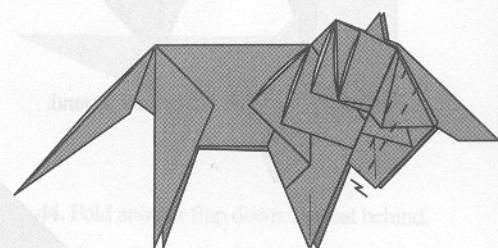
55. Spread the layers of the head. The model will be 3D from here onward. Steps 56–57 are a view from the front.



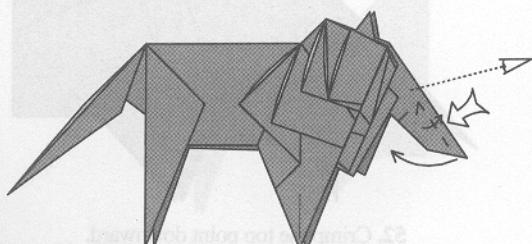
56. Narrow the head with pleats tucked up



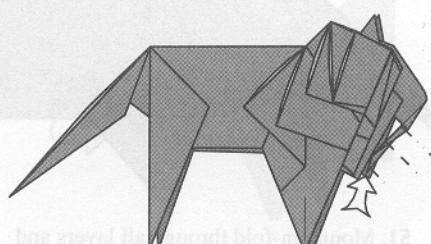
57. Round the head and close it up. The model is now 3D.



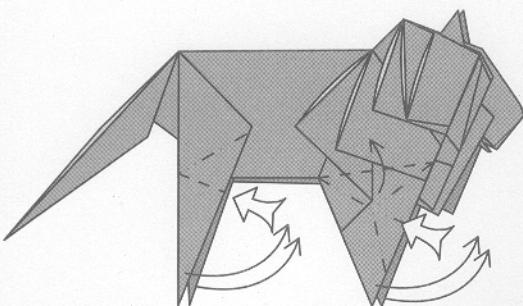
58. Pleat the layers around the face.



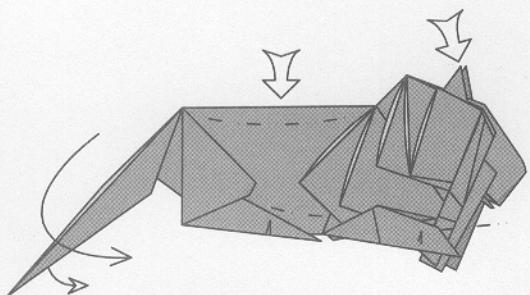
59. Squash-fold the nose downward and wrap the edges around the front of the face.



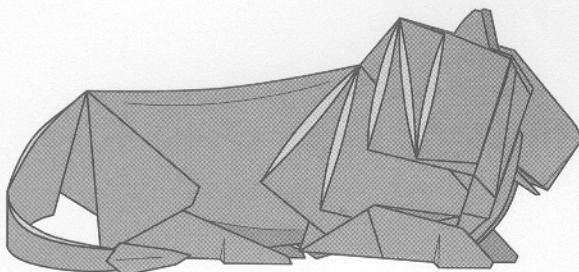
60. Sink the corner of the flap. Fold it back and forth to make a lower jaw.



61. Crimp the feet upward. Note that the forelegs are asymmetric.



62. Curl the tail and pull some paper out of its tip to fluff it. Round the body, top and bottom. Crimp the paws. Blunt the ears. Curl the layers of the mane around under the head. Round and shape the entire body.



63. Finished Lion.

雑誌『折紙探偵団』年間購読のご案内

雑誌「折紙探偵団」は日本折紙学会の機関誌です。隔月刊(奇数月25日発行)で年6回発行されます。年間購読制です(ばら売りは行っておりません)。

- 申込方法**
- 郵便振替にてご送金下さい(普通の振替用紙でお申込み頂けます)。
 - 振替用紙の「通信欄」に下記必要事項をご記入下さい。

第14期(2003年4月~2004年3月/79~84号)

年間購読費 3,600円(送料込み)

期変わりに料金が変更になる場合があります。2004年4月以降は事務局にお問い合わせください。

口座名 折紙探偵団 振替口座番号 00180-8-579860

記入必要事項 1~3は必ずお書き下さい。

**1. 住所 2. 氏名 *ふりがなを
お願ひします。 3. 電話、FAX番号 4. E-Mailアドレス 5. 性別 6. 生年月日 7. 職業**



雑誌「折紙探偵団」79号表紙
表紙フルカラー/本文38ページ
(カラー1枚2ページ含む)

■パックナンバー購入について

現在10期~13期を取り扱っております。「通信欄」のところへ希望する期を明記の上、相当金額をお振り込み下さい。

10期(55~60号)…3,000円、11期(61~66号)・12期(67~72号)・13期(73~78号)…各3,600円
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Get City to stand by side based on the
tip of wing of hand the body and head power
chum the base. Pull the City the base.
spins the curve body.

Get City to stand by side based on the
tip of wing of hand the body and head power

④ Put the crimp back in the top point,
but at the same time pleat the forelegs
and fold the bases to the top crimp.

→ fold behind.

⑤ Narrow the head with pleats tucked up.

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発行人／西川誠司

編集人／山口 真

編集スタッフ／松浦英子、神谷哲史

デザイン／おりがみはうす

翻訳協力／立石浩一

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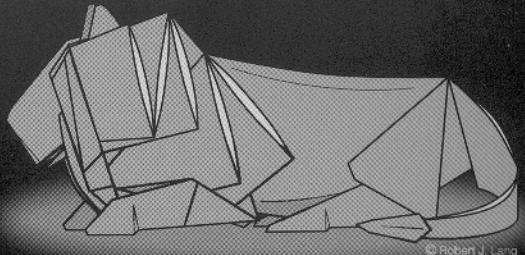
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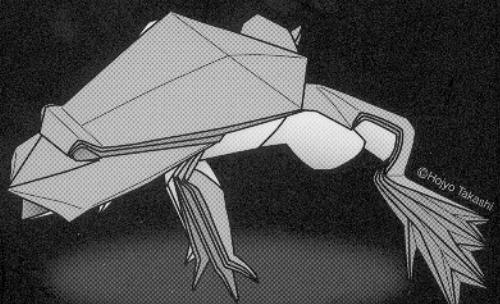
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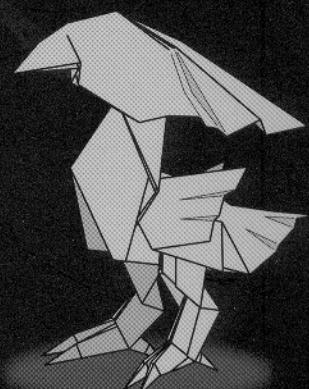
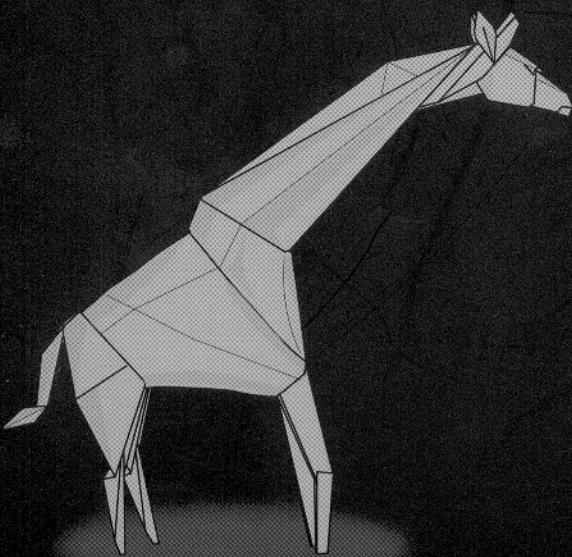


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