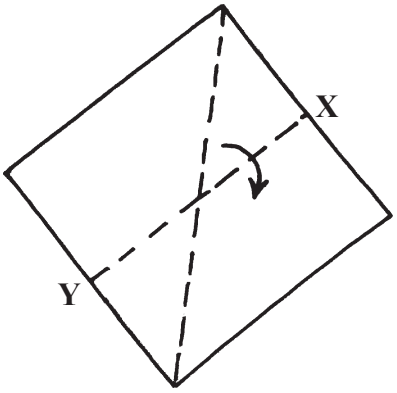
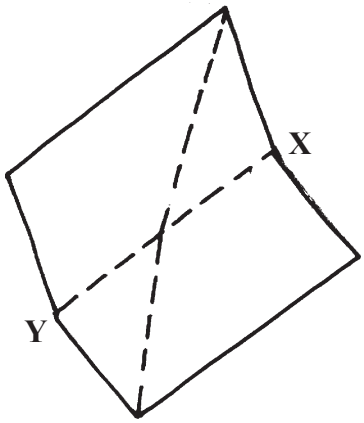
GRID OF EQUILATERAL TRIANGLES

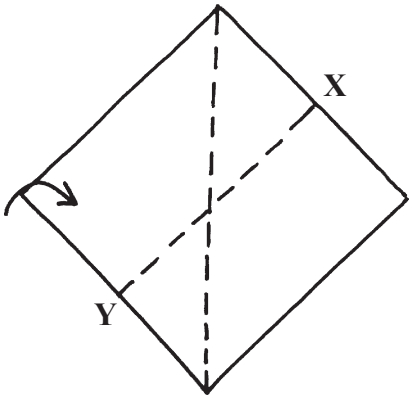
You could easily fold a grid of equilateral triangles in a paper square.
Using nets of these triangles, you could fold a number of 3-D shapes - tetrahedrons, octahedrons etc.



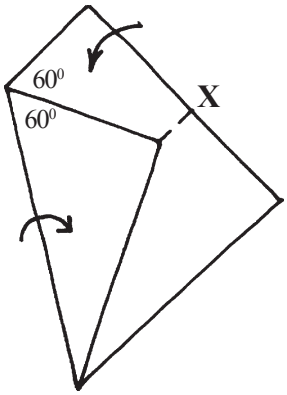
1. Cut the biggest square from an A-4 size Xerox paper. Fold the middle crease to make two equal rectangles.



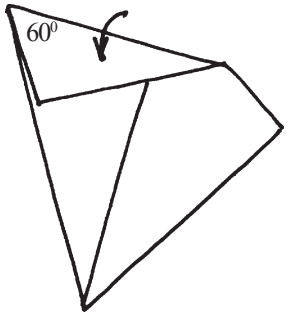
2. Open the square.



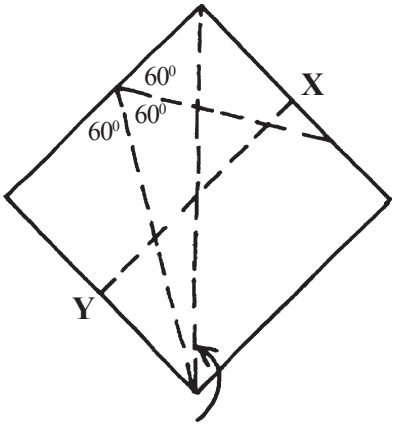
3. Fold the left hand corner and move it on the mid-line (XY) till the left edge passes the bottom corner.



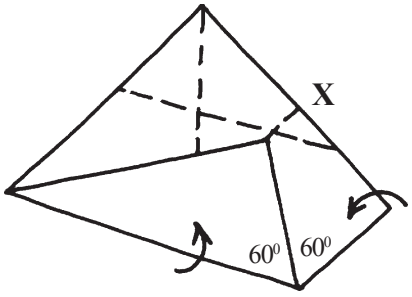
4. This would be the result. This is a wonderful way to crease 60^0 angles. Fold the top corner such that...



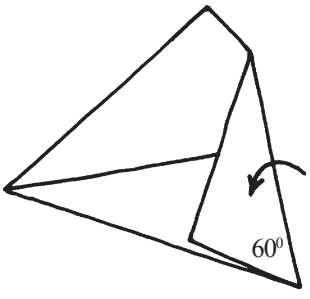
5. ....its edge sits exactly on top of the left edge.



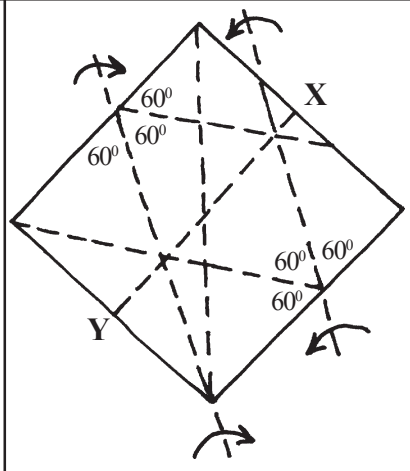
6. On opening the paper you will find the left-top edge divided into three 60^0 angles.



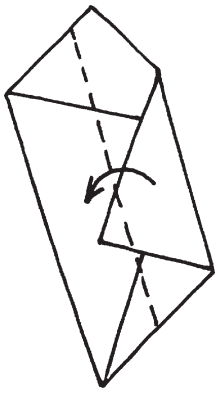
7. Fold the bottom corner and move it on the mid-line (XY) till the bottom edge passes the left corner. Fold the right corner such that....



8. ...its edge sits exactly on the top bottom edge.

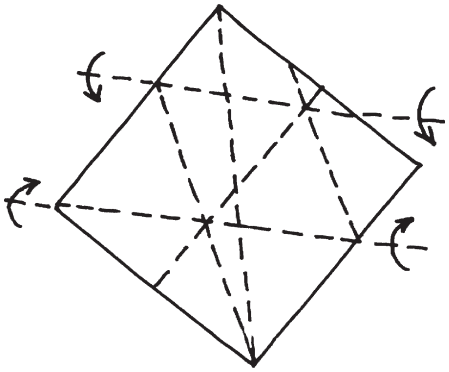


9. On opening the square you will find several big 60^0 equilateral triangles. Fold two lines in the directions shown...

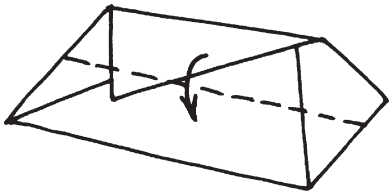


10....to get this shape.

11. Fold it again in half.

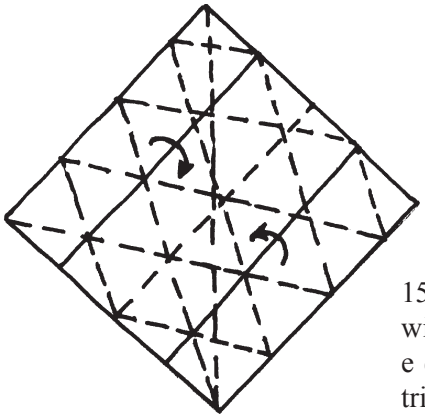


12. Open the square and fold two creases in the directions shown...

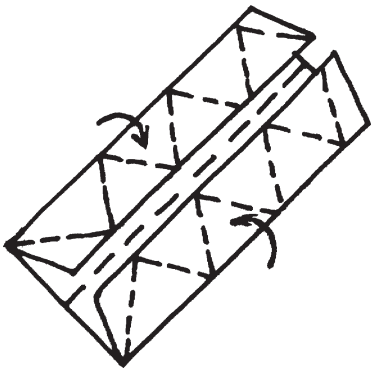


13...to get this shape.

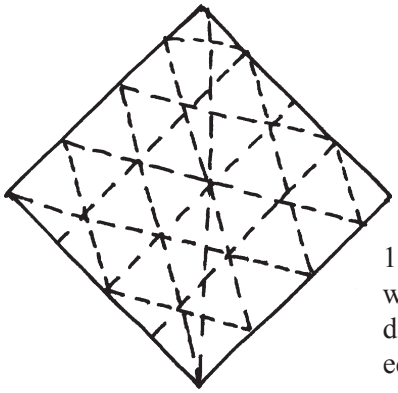
14. Fold it again in half.



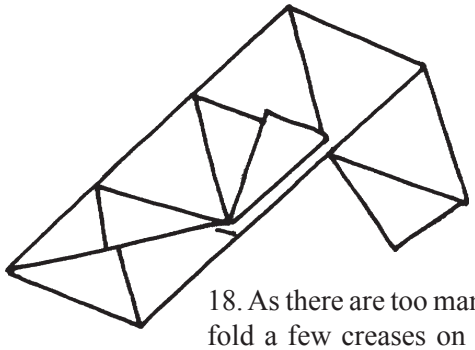
15. On opening you will find a grid of equilateral triangles. Fold the two lines as shown.



16. To get a rectangular shape.



17. On opening you will see the square divided into equilateral triangles.



18. As there are too many triangles, fold a few creases on top and the sides to reduce their numbers.

19. Finally assemble a self-locked Tetrahedron, without using any glue or scissors!