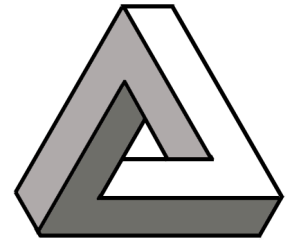


How to Draw a Penrose Tribar & Tessellations



c. 2018, 2022 Meryl Ann Butler/ Ocean View Arts

Learning how to draw nonordinary images such as tessellations and optical illusions is simple with instruction, yet is consciousness expanding because it is a visceral experience in out-of-the-box thinking.

If you wish to draw along with me in the workshop, you will need:

For Penrose Tribar optical illusion:

1. Printout or visual access to this pdf.
2. Print out of page 3, Penrose Tribar Graph Paper. (note: this page is designed to print out lightly)
3. Pencil and straightedge or ruler

For Tessellations:

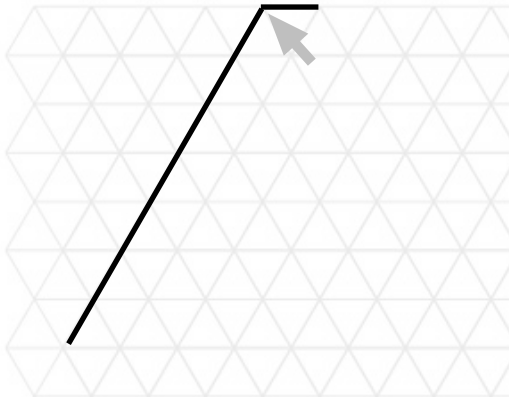
1. A square of card stock (a square cut from an index card works) or paper approximately 2" - 2.5". A square postable note can work. Card stock works best, heavier paper than copy paper is better if available.
2. Pencil, scissors, tape
3. A blank sheet of paper, copy paper is fine

For Both:

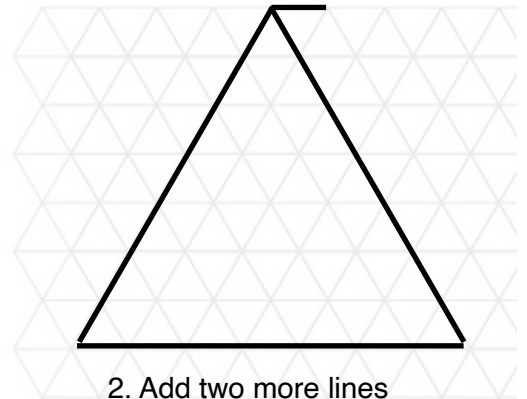
1. Eager anticipation! ;-)



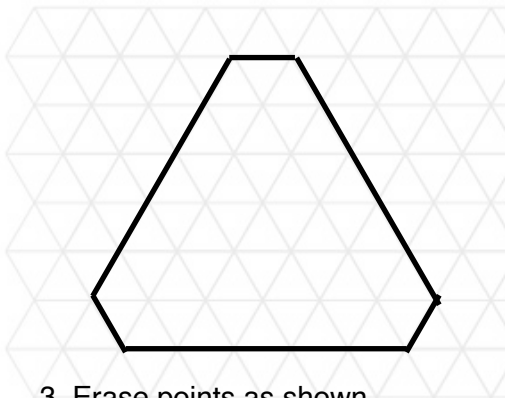
How to Draw a Penrose Tribar



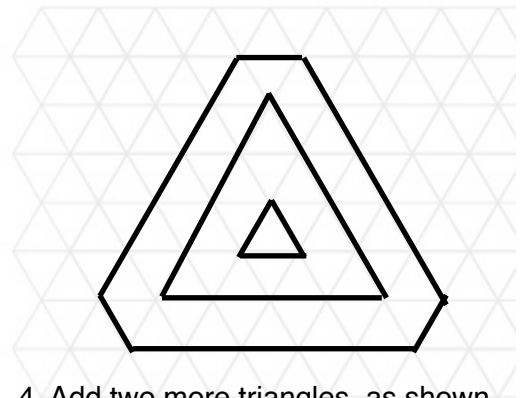
1. Starting at point shown, draw a line, measuring 7 triangle bases long.



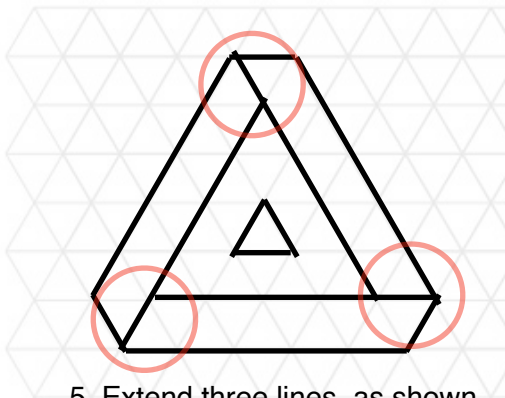
2. Add two more lines



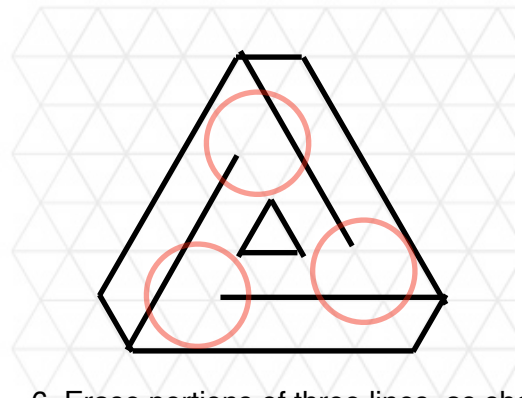
3. Erase points as shown.



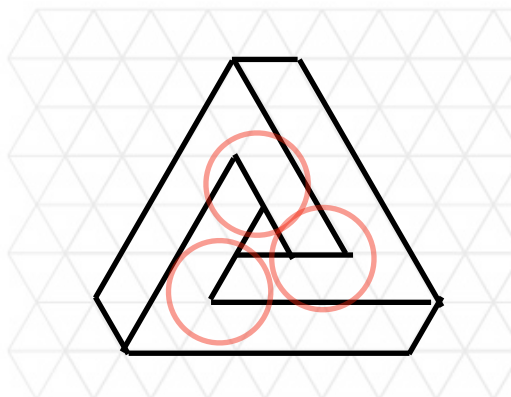
4. Add two more triangles, as shown.



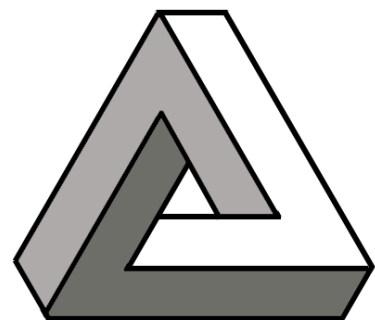
5. Extend three lines, as shown.



6. Erase portions of three lines, as shown.

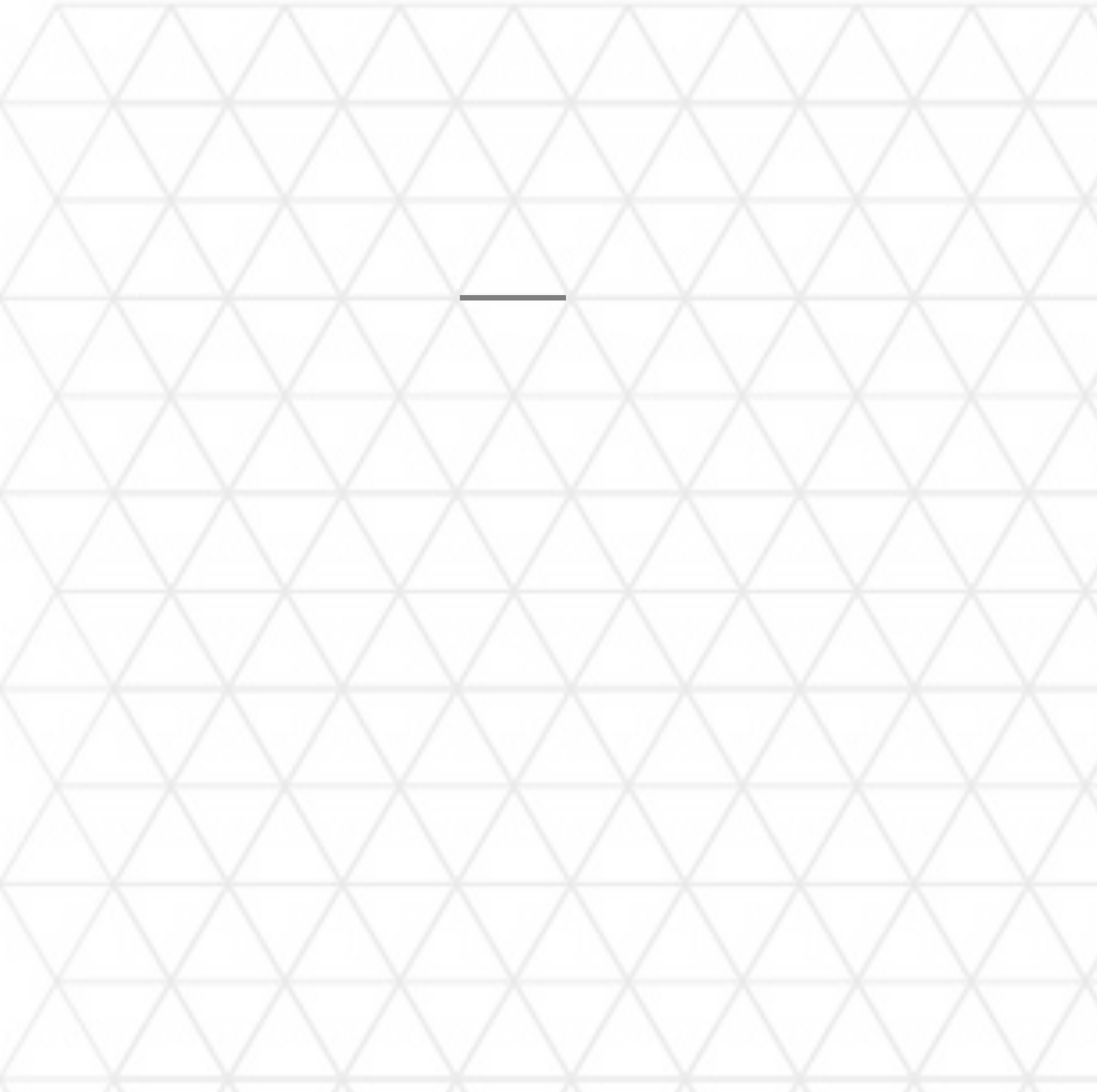


7. Extend three lines, as shown.



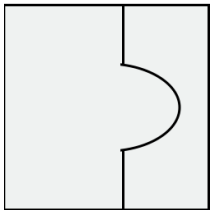
8. Add values.

Penrose Tribar Graph Paper

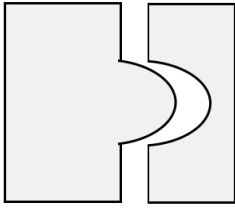


How to Make a Simple Tessellation

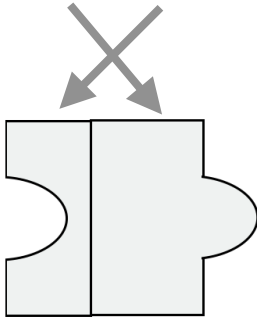
2



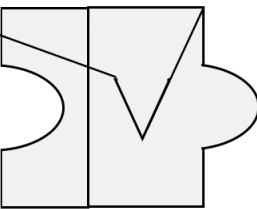
3



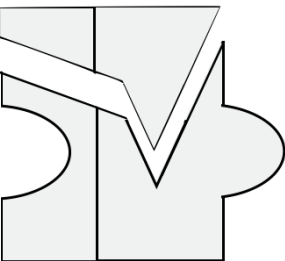
4



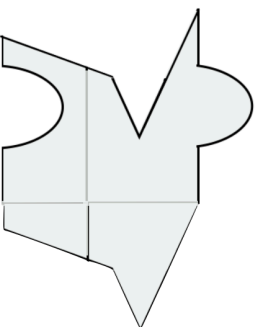
5



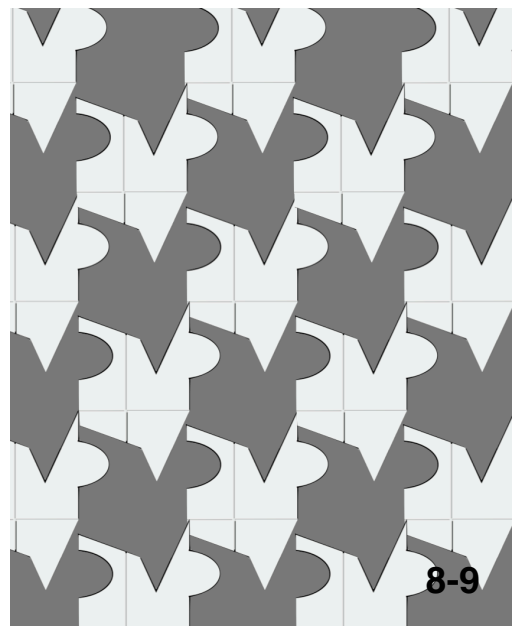
6



7



1. Cut a square or rectangle from card stock or an index card. Sizes between 2" - 2.5" work well for experimentation.
2. Draw an interesting line from the top of the square or rectangle to the bottom — this line could be wiggly, wavy, angular, jagged, organic, zigzag, bumpy - whatever you choose, as long as it does not cross over itself.
3. Cut along the line.
4. Move the left piece over to the right side so that the two straight edges are flush against each other in the middle. Tape them together. This creates a tessellating shape, (but not a very interesting one, yet, so the process is repeated.)
5. Draw another interesting line from left to right.
6. Cut along the line.
7. Move the top piece to the bottom of the unit, and tape. You now have a tessellating template!
8. Trace your template onto a piece of paper, and then reposition it so that it lines up with the drawn shape like a puzzle piece. Trace, continuing to add your tessellating shapes until you fill the paper.
9. Pencil in a value on alternate shapes so the design shows up.



8-9