

Warmup 4/(# of letters in the alphabet – 2)

SIT WHERE YOU WANT

1. Go over to where the line designs from last year are. Find some that you like. Try to get some ideas for a design you might want to make.
2. Get a ruler from Mr. Lischwe's desk. (If all the rulers are gone, you will need to use a protractor)

Line Designs

- Video Tutorial:

<https://www.youtube.com/watch?v=IfvC21f0hxE>

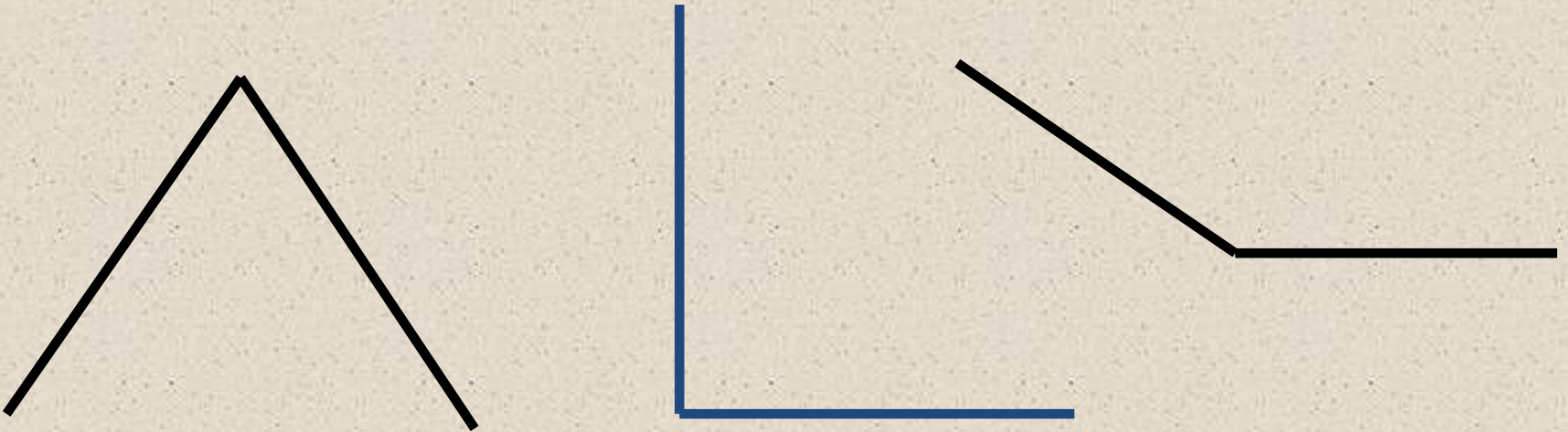
Best tool to use...

- MECHANICAL PENCIL
- More precise than a regular pencil
- Regular pencils get duller as you use them, which changes the thickness of the lines

A note about rulers...

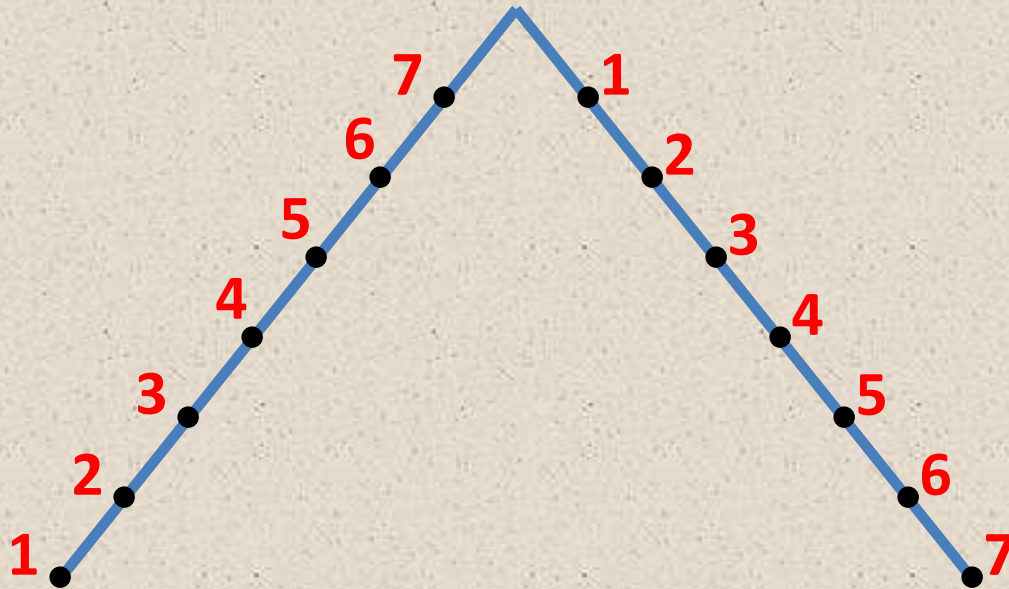
- DO NOT hit them against things
- If you dent the side of a ruler, it will not make a straight line anymore – which can ruin a line design!

- The simplest line design comes from one angle.
- The angle can be **any shape**.

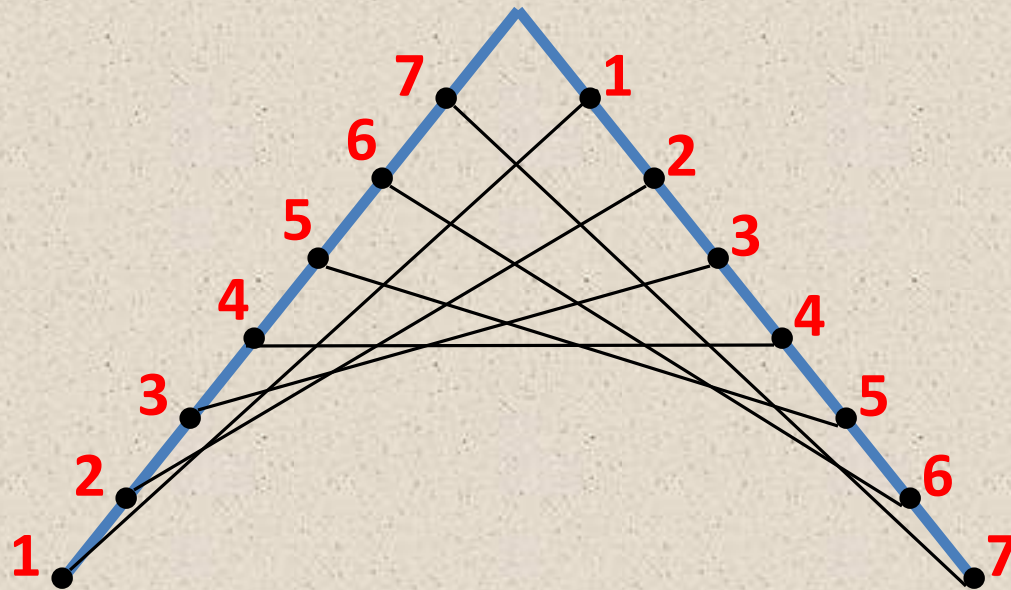


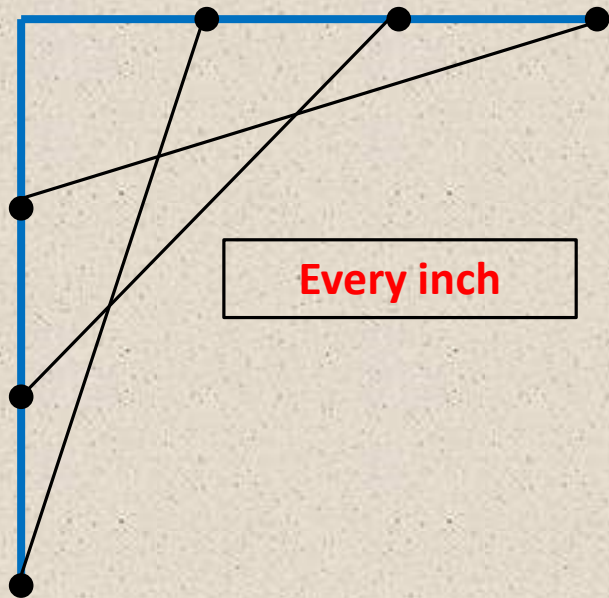
- No matter what shape you make your angle, it is easiest if **both sides of the angle are the same length**.

- Use your ruler to draw an angle of any shape.
 - Make sure the sides are the same length.
- Mark a **dot** at every centimeter on both sides.
- The smaller the dot, the better.
- Number the dots like this:

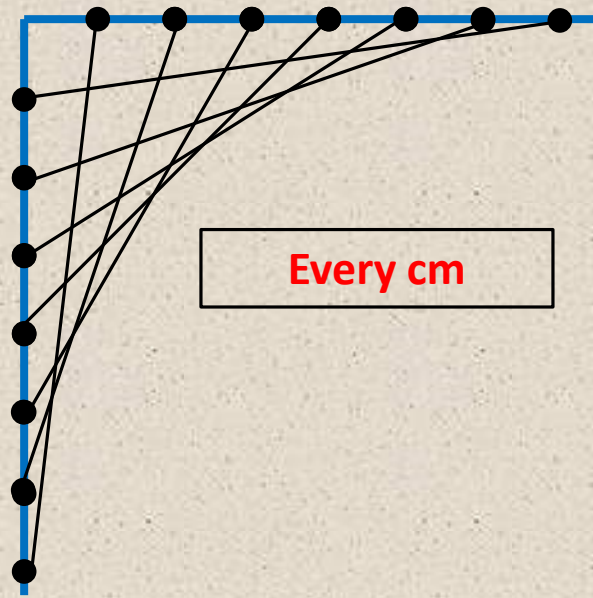


- **WITH A RULER**, connect 1 with 1, 2 with 2, etc.
- Be as **precise as possible**. The more precise you are, the better your design will look.

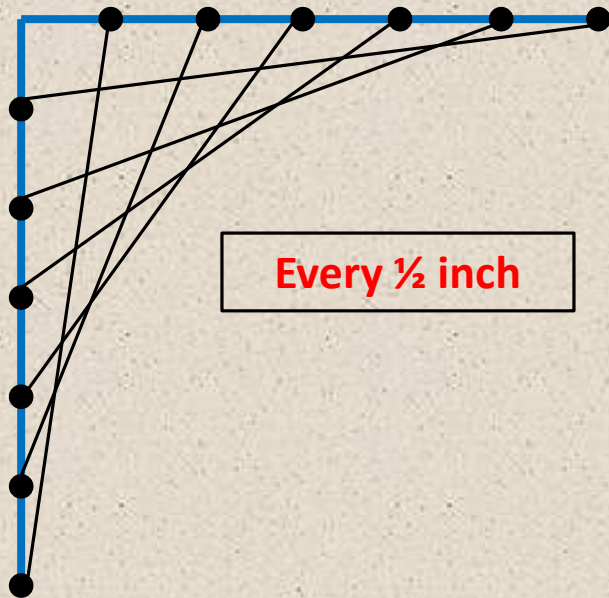




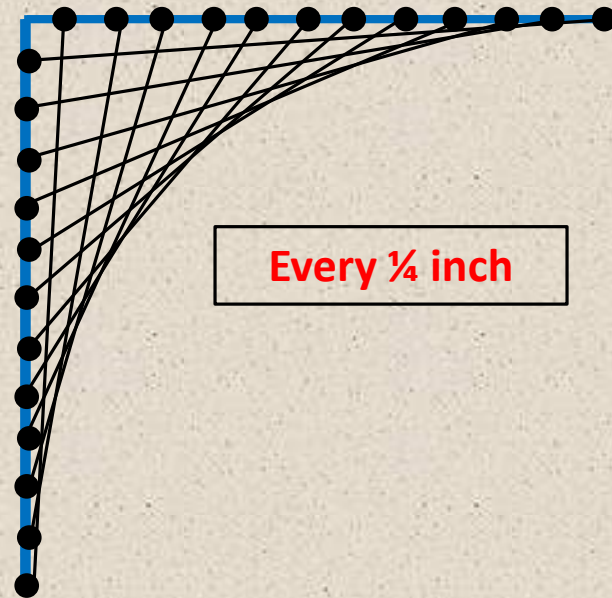
Every inch



Every cm

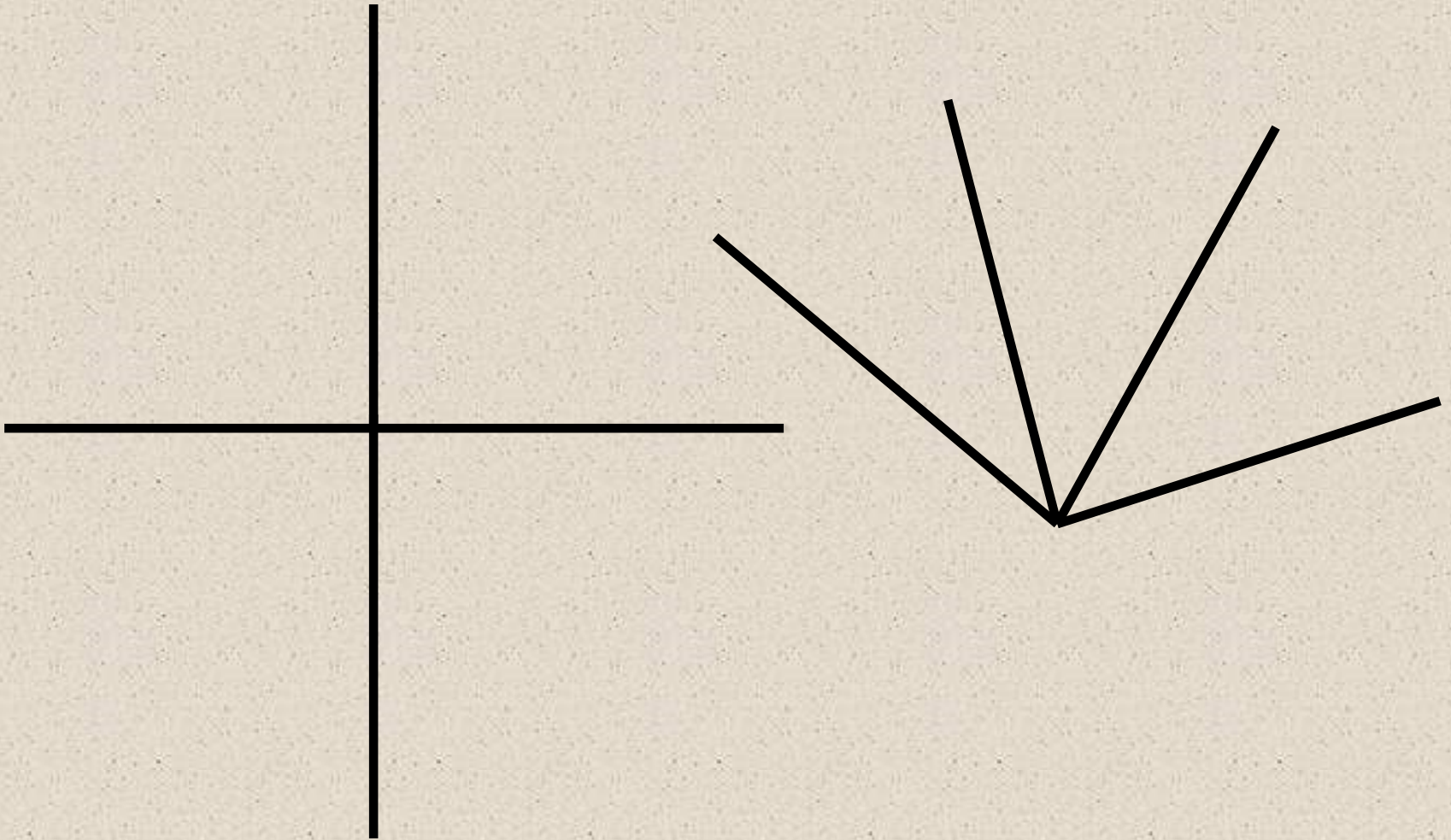


Every $\frac{1}{2}$ inch

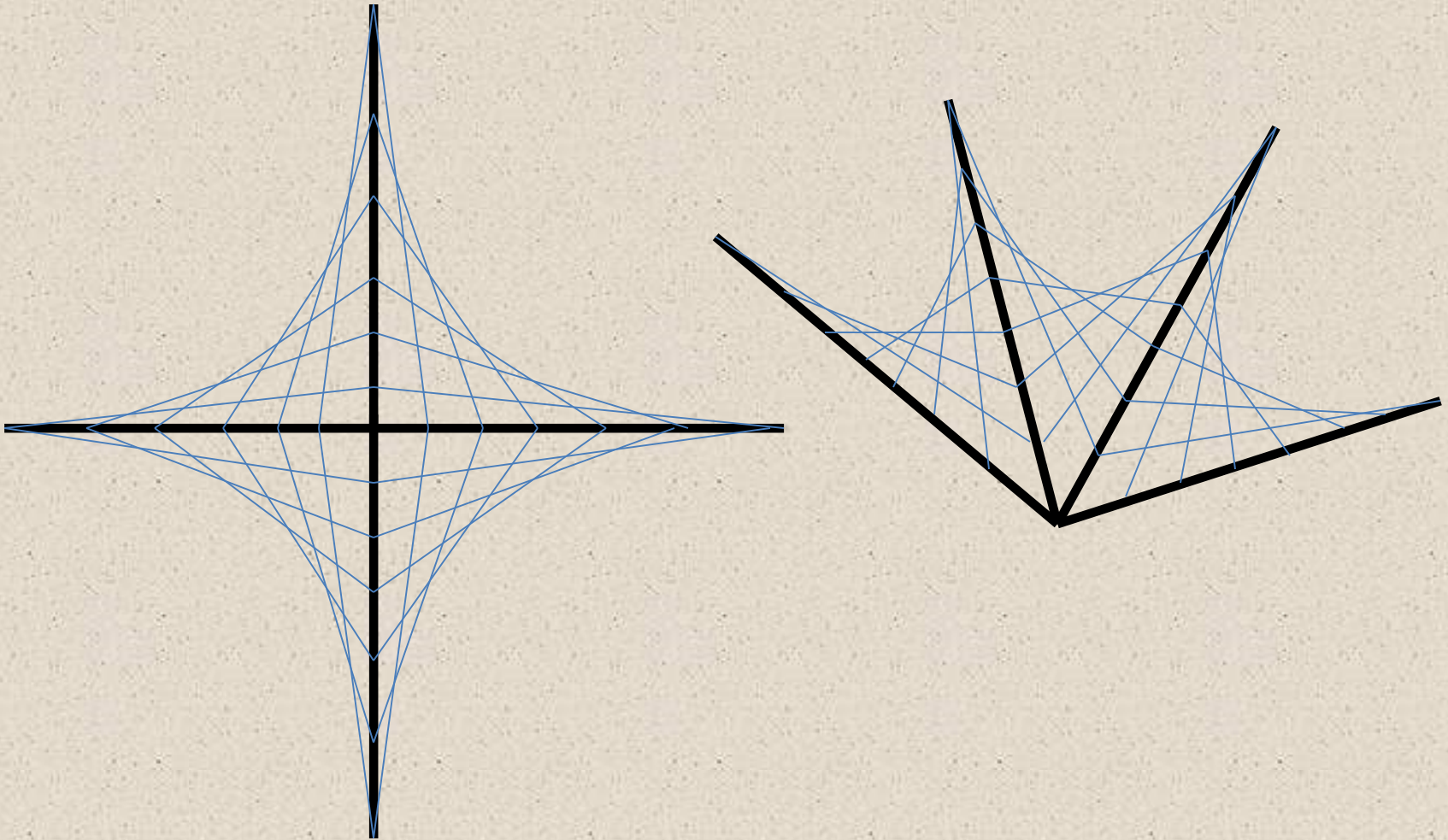


Every $\frac{1}{4}$ inch

- You can put more than one angle back-to-back...



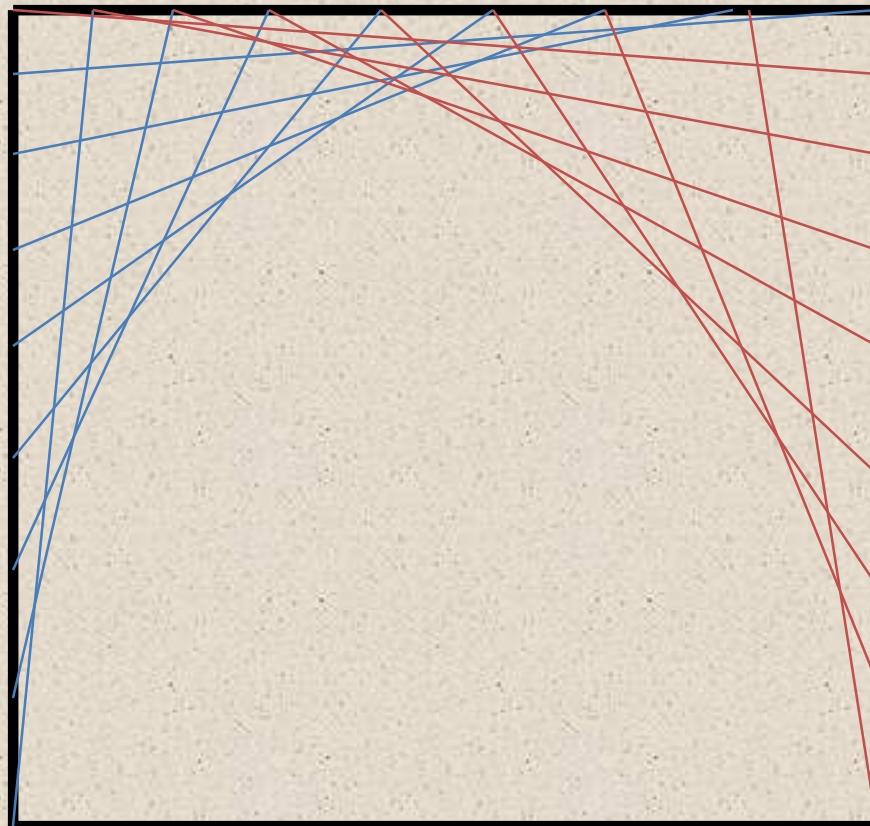
- You can put more than one angle back-to-back...



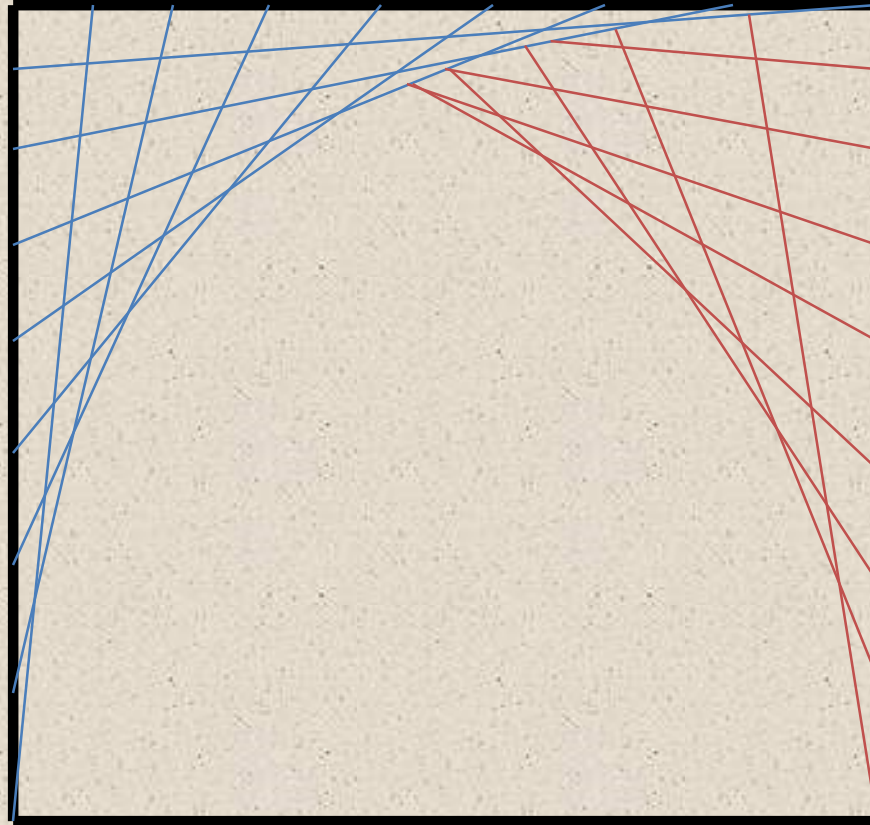
You can make the angles overlap...



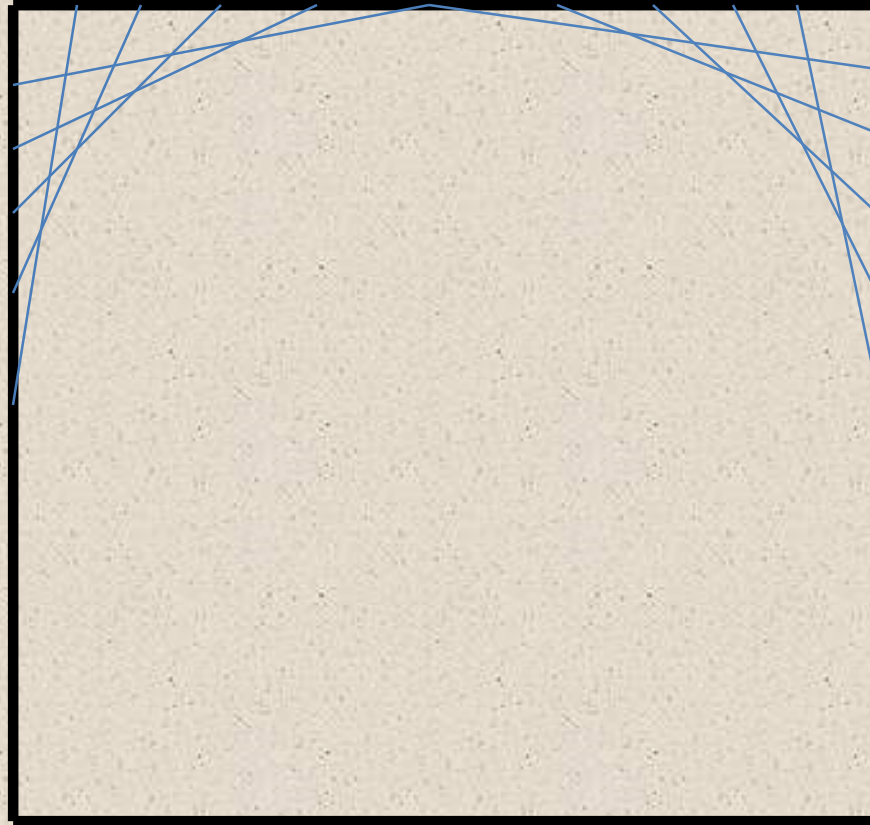
You can make the angles overlap...



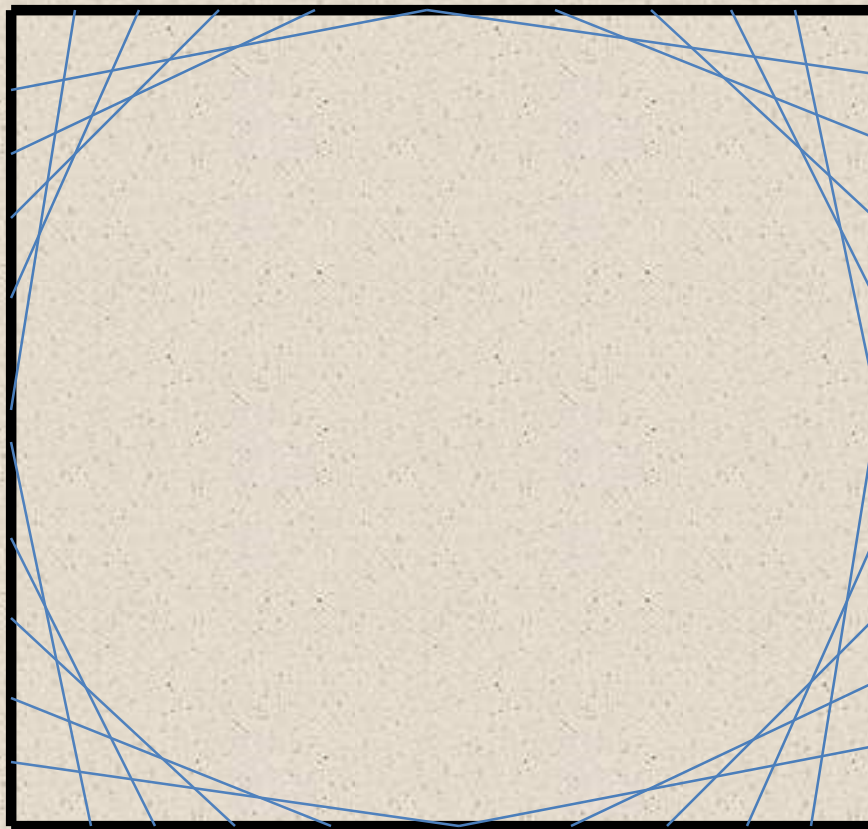
Or not overlap...



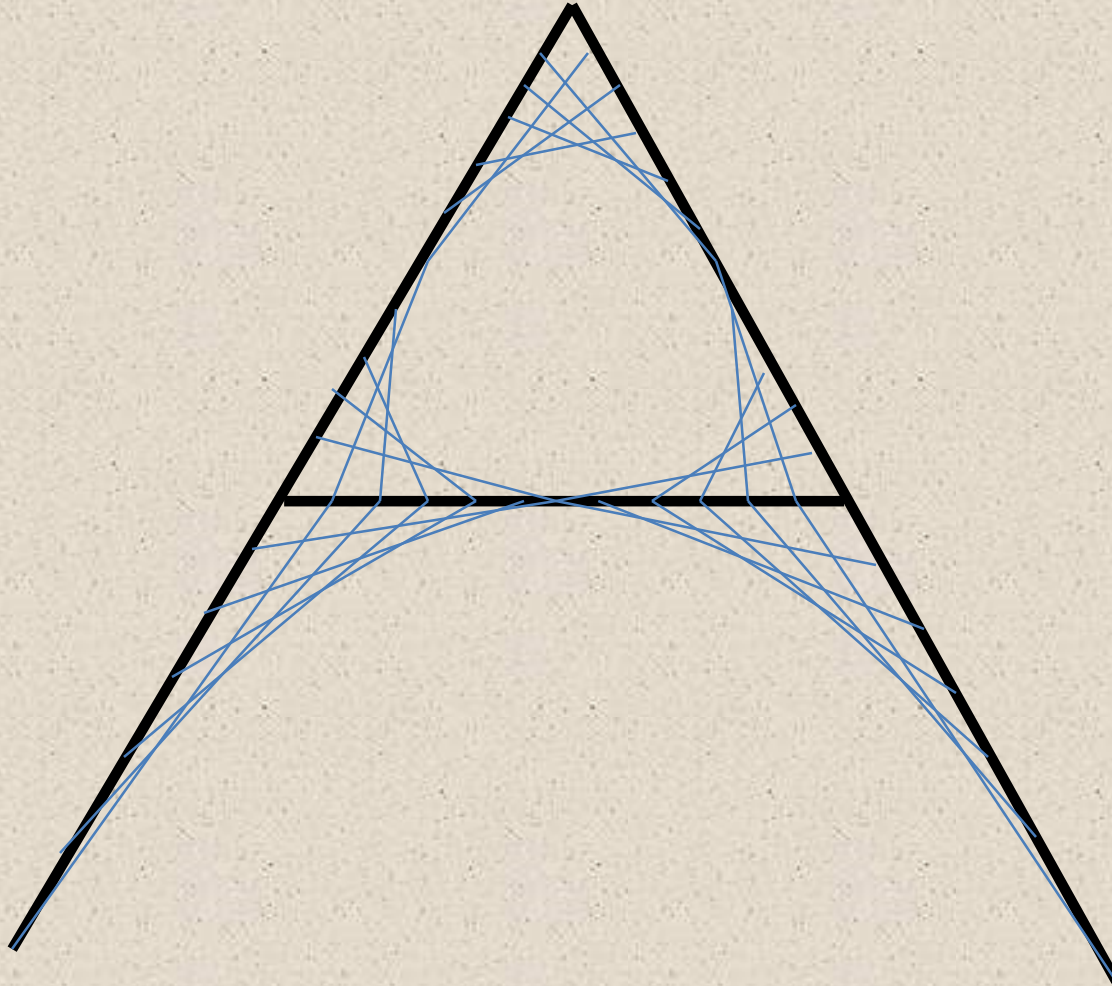
Or you can do half an angle...



Or you can do half an angle...

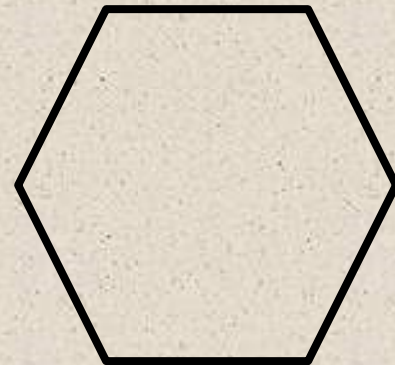
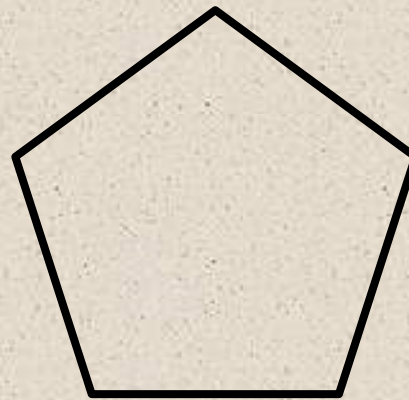
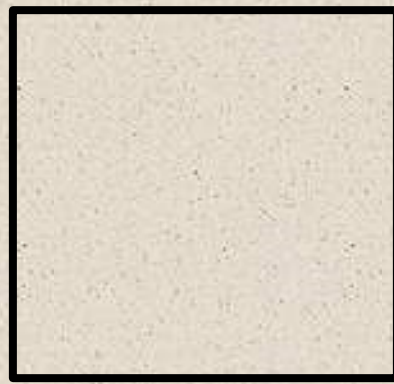
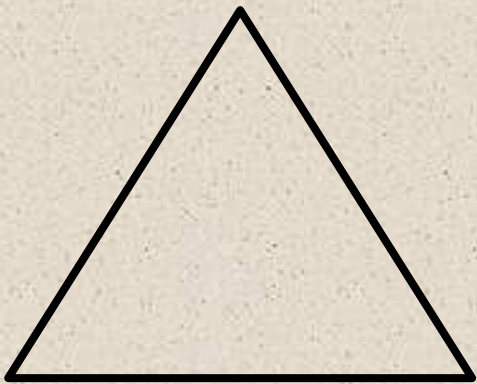


You can do letters, or even words...

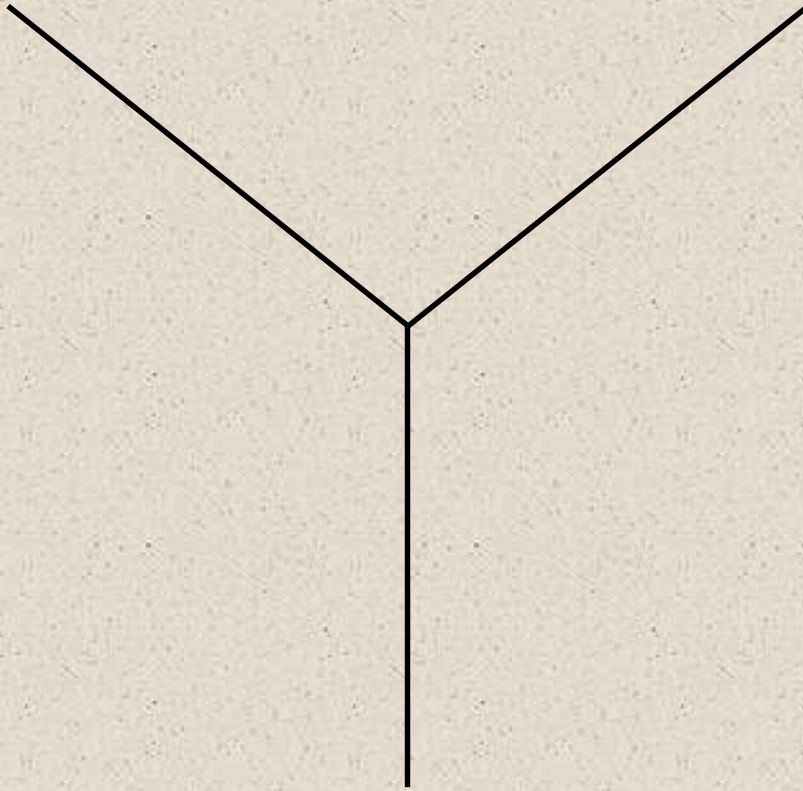


You can use a **protractor** to make certain shapes...

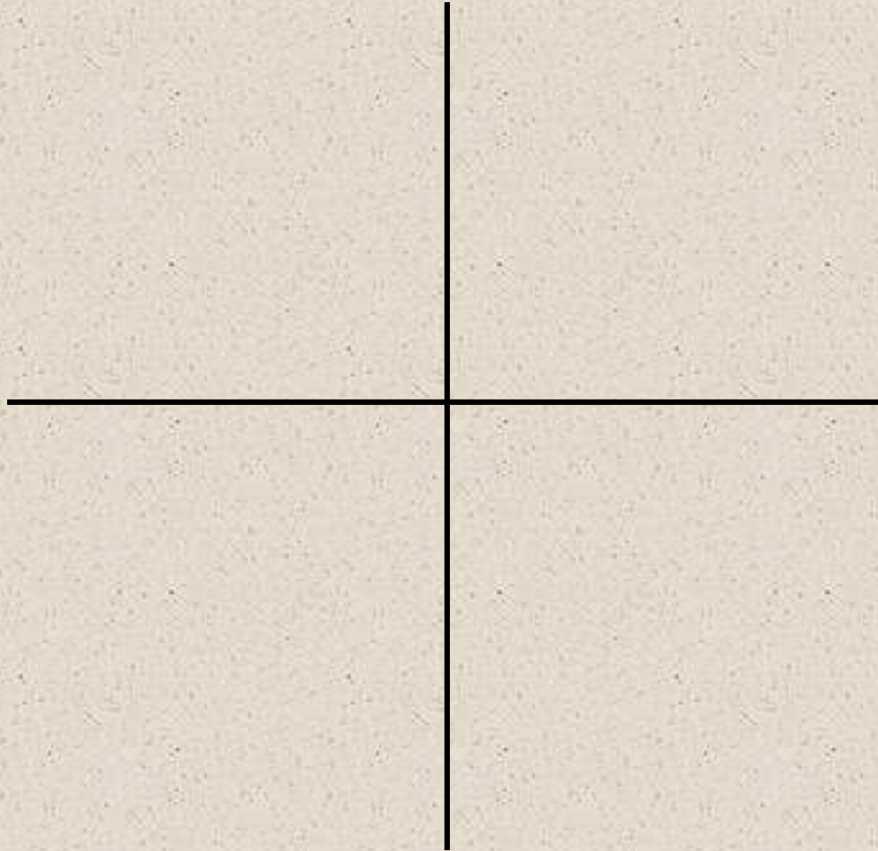
- Perfect triangles have 60 degree angles
- Squares have 90 degree angles
- Pentagons have 108 degree angles
- Hexagons have 120 degree angles



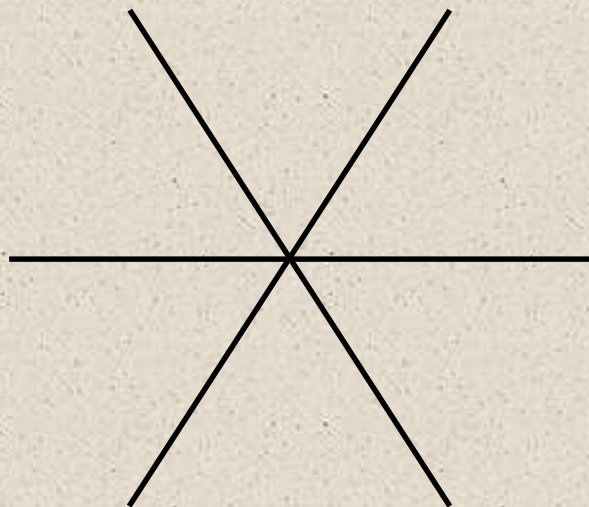
Sample ideas...



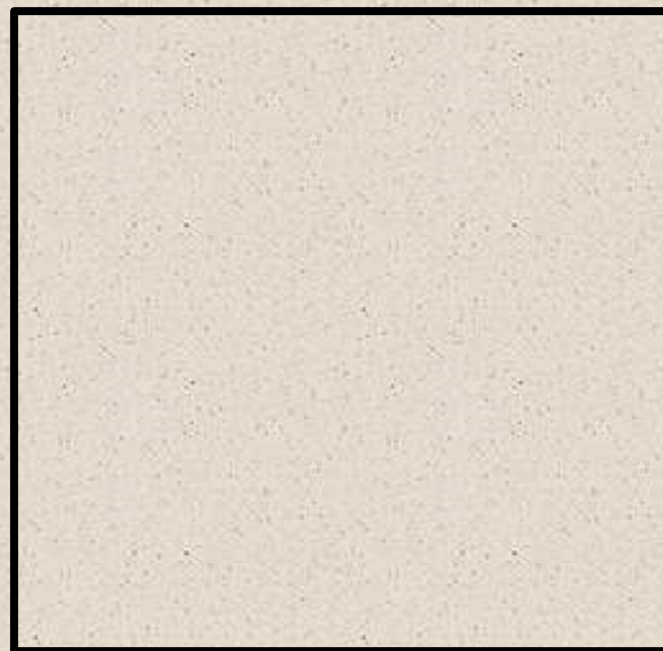
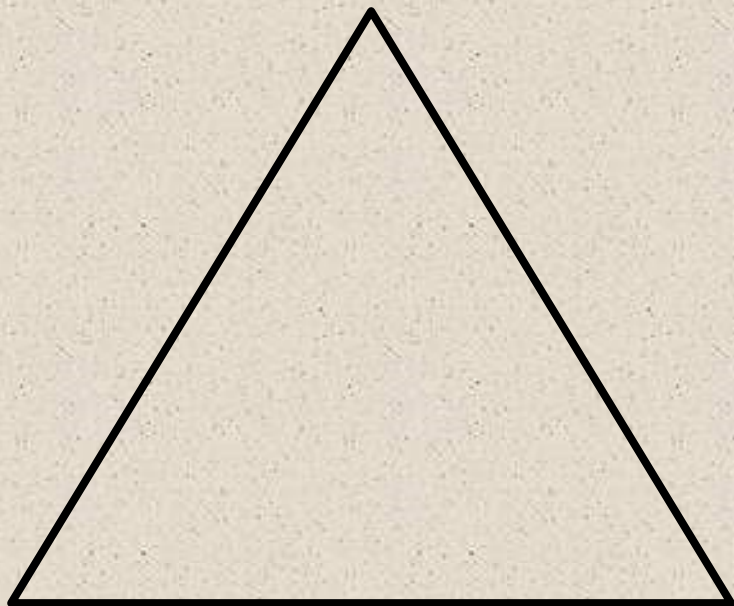
Sample ideas...



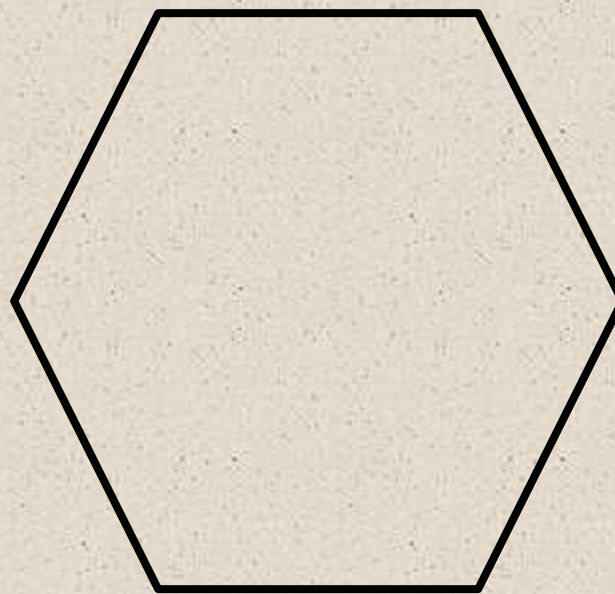
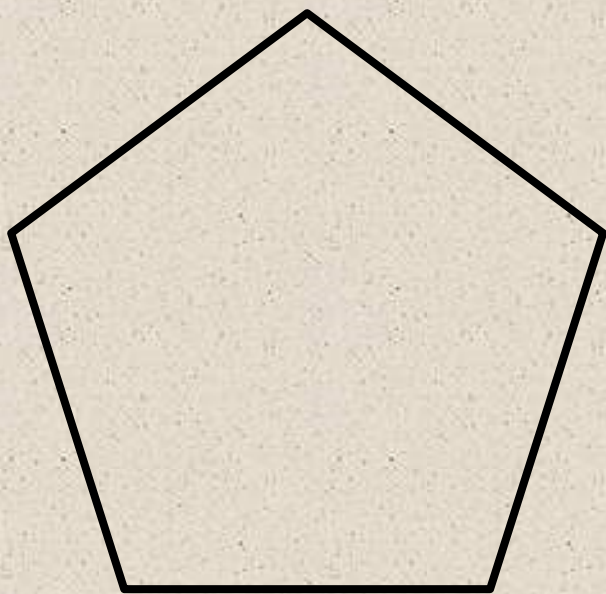
Sample ideas...



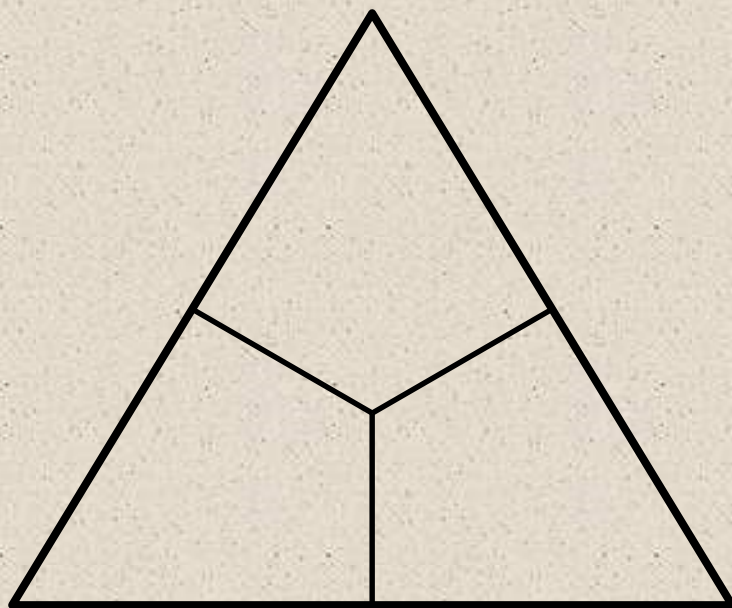
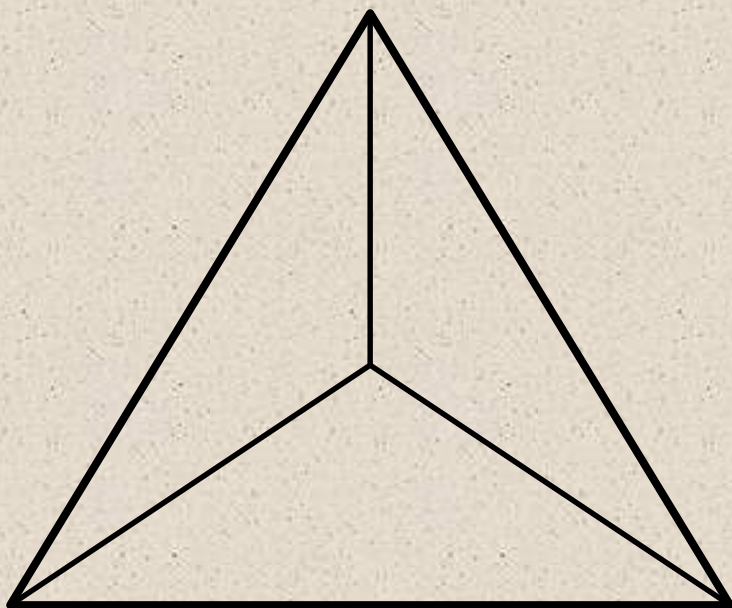
Sample ideas...



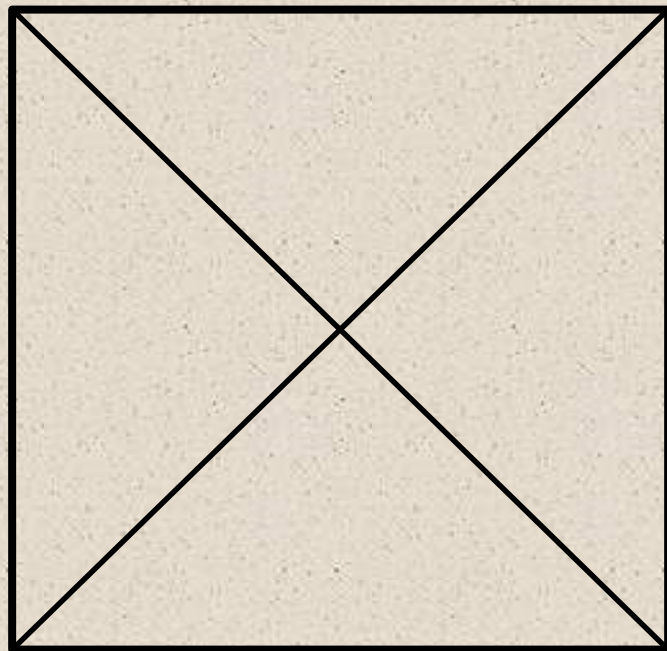
Sample ideas...



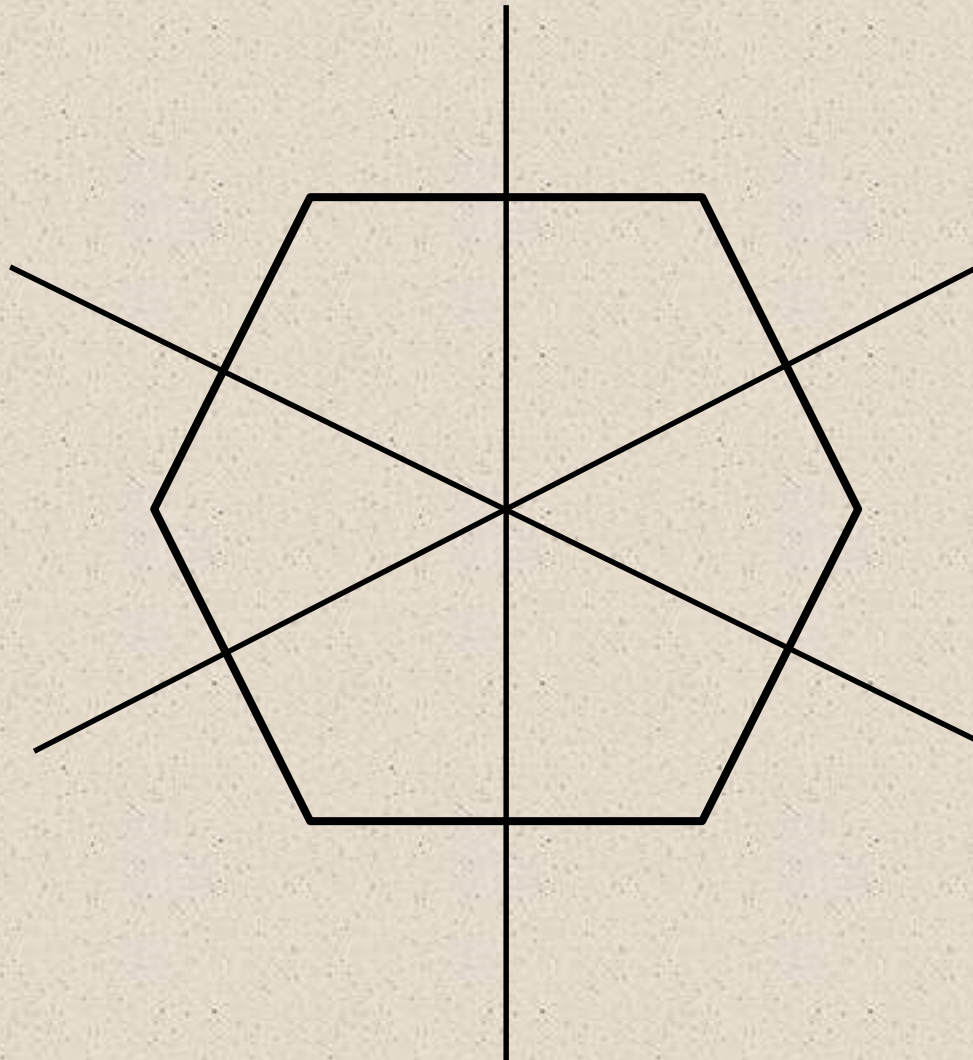
Sample ideas...



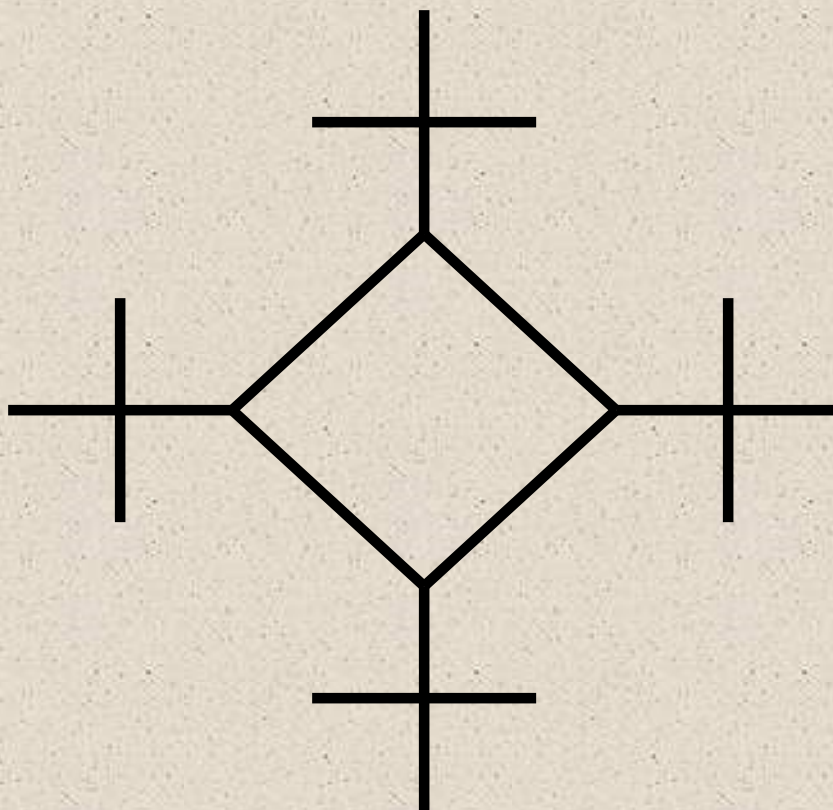
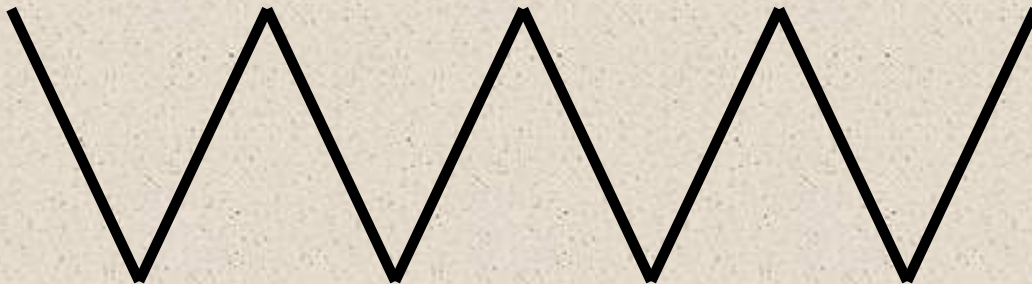
Sample ideas...



Sample ideas...



Be creative!!!



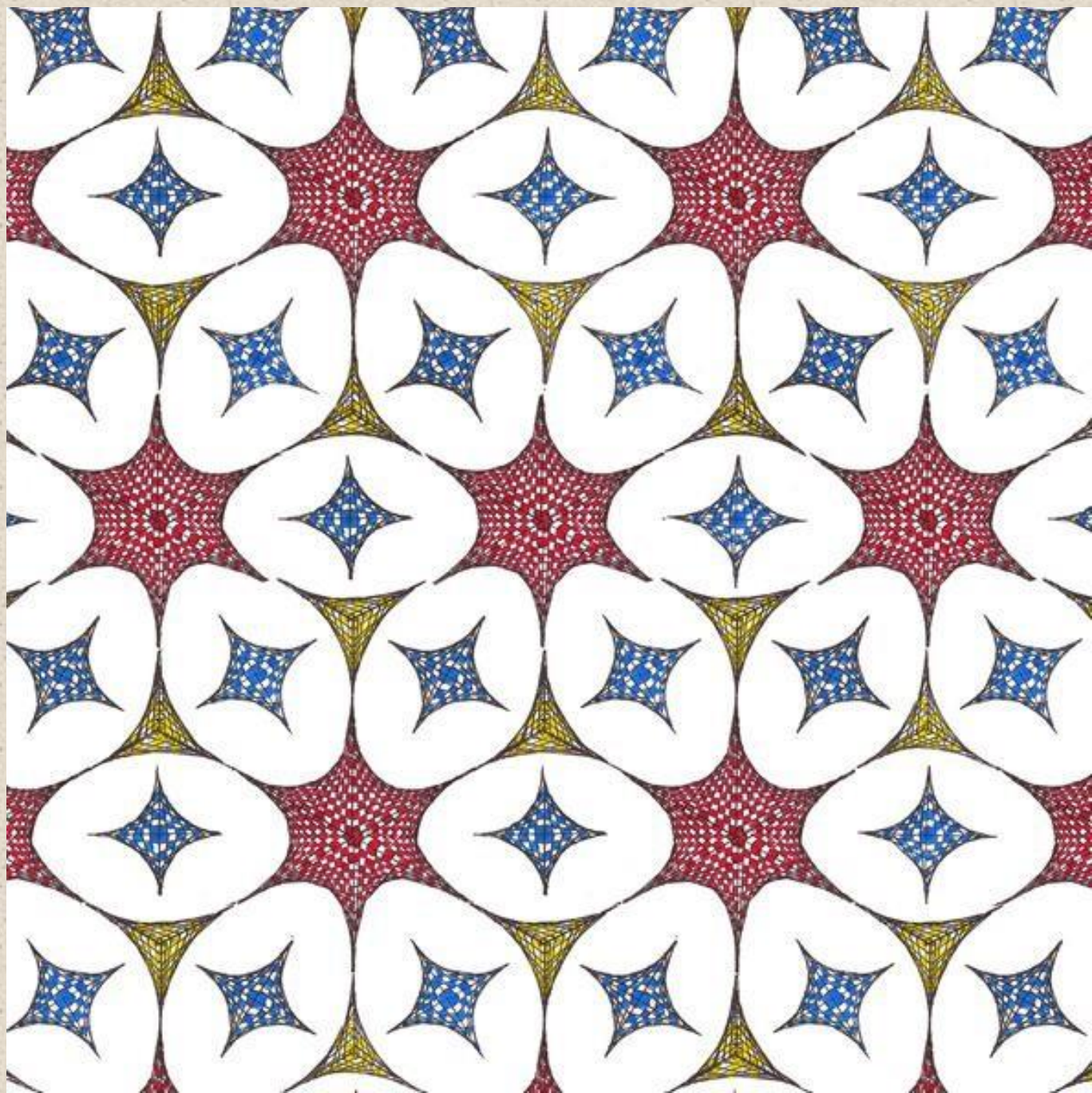
<http://mrchads.weebly.com/uploads/9/1/3/8/9138245/circle-animation.gif>

But no matter which design you choose...

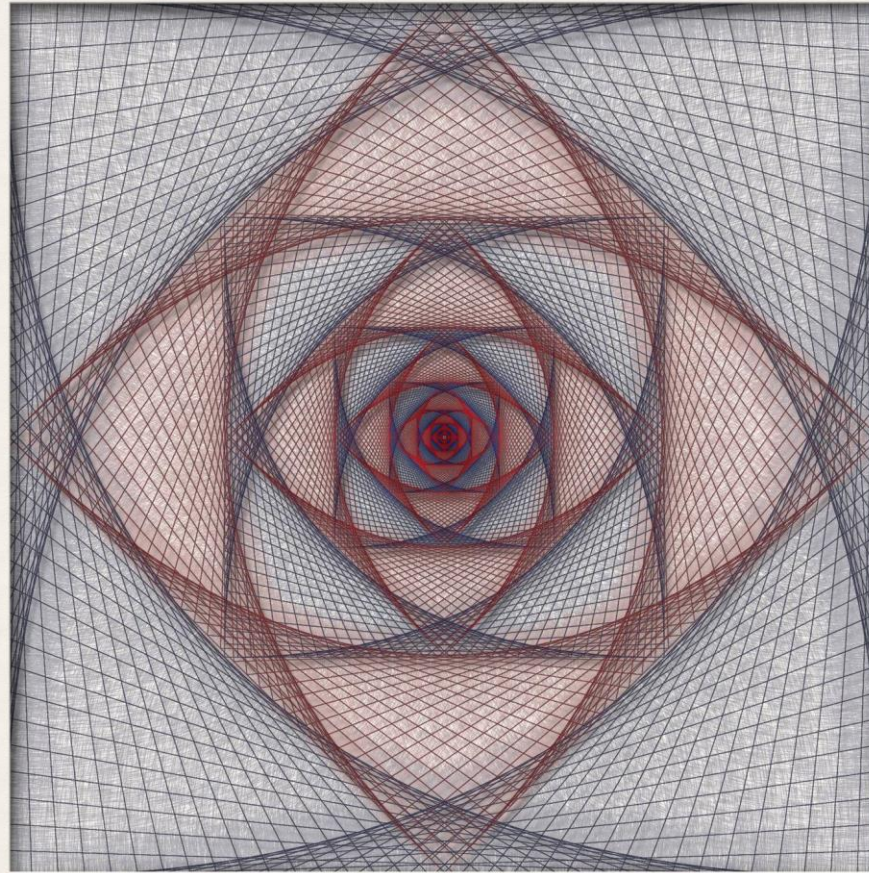
- You **MUST** color it!
- Medium or far-apart dots: you must color the squares in (a checkerboard pattern usually looks best)
- Very close-together dots: use colored pens or thin markers to make the lines themselves



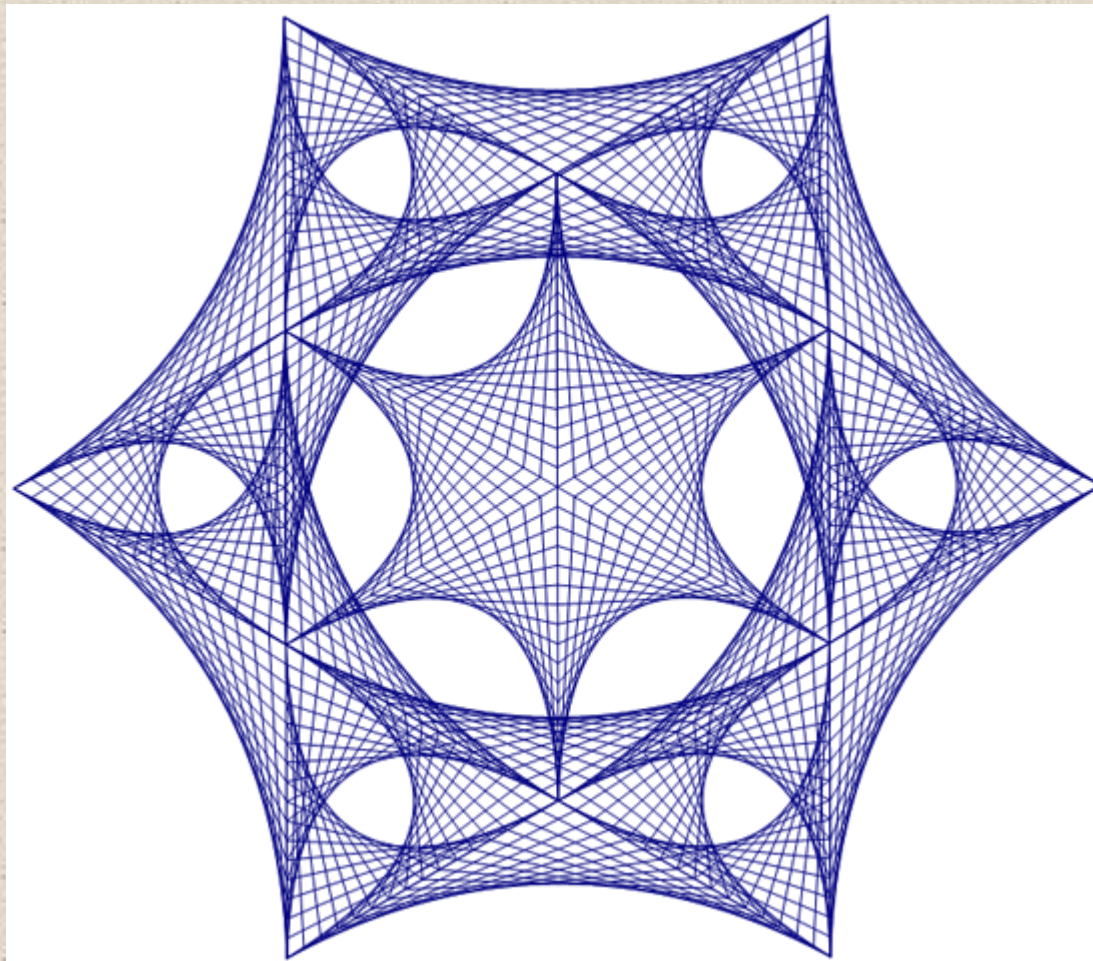


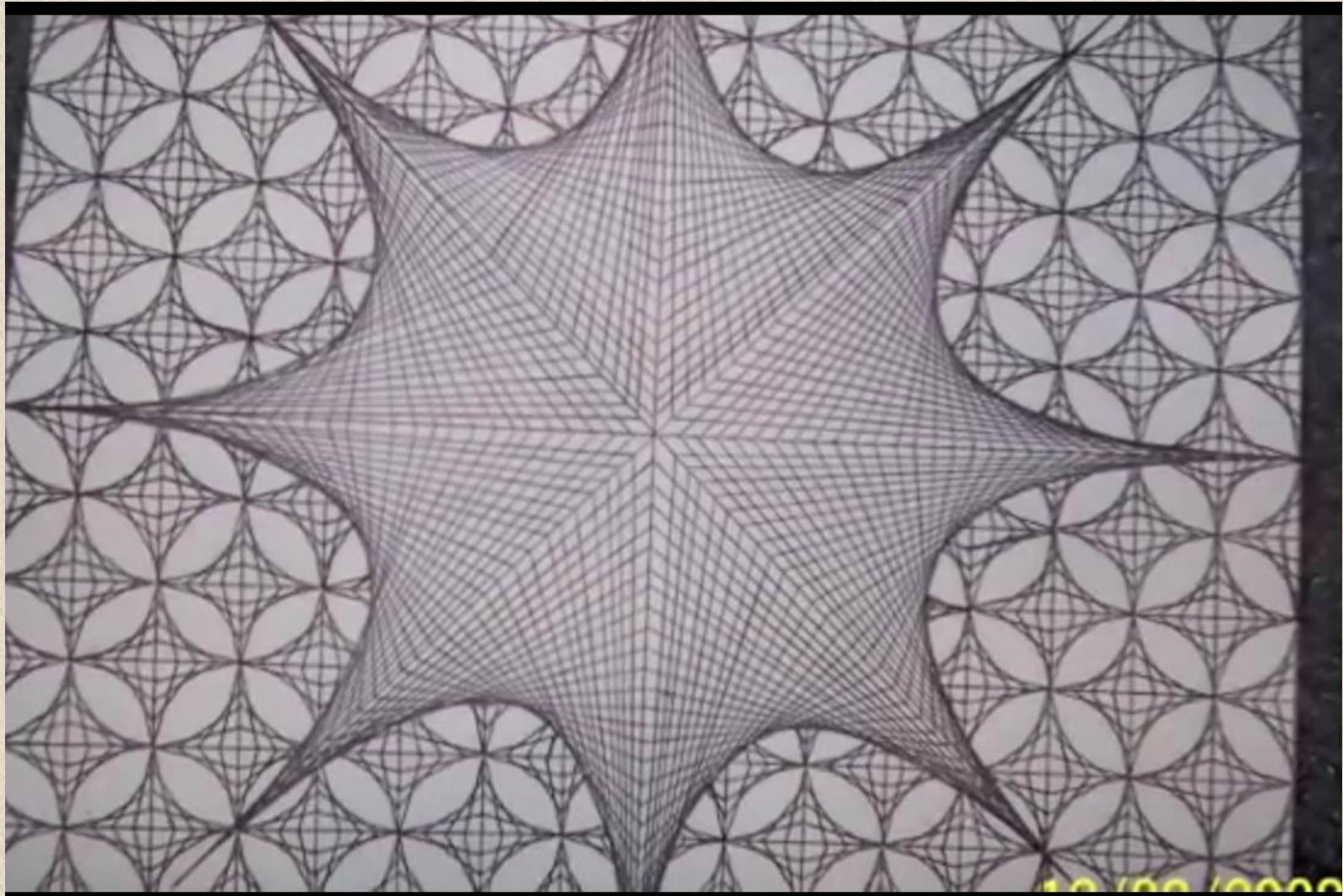


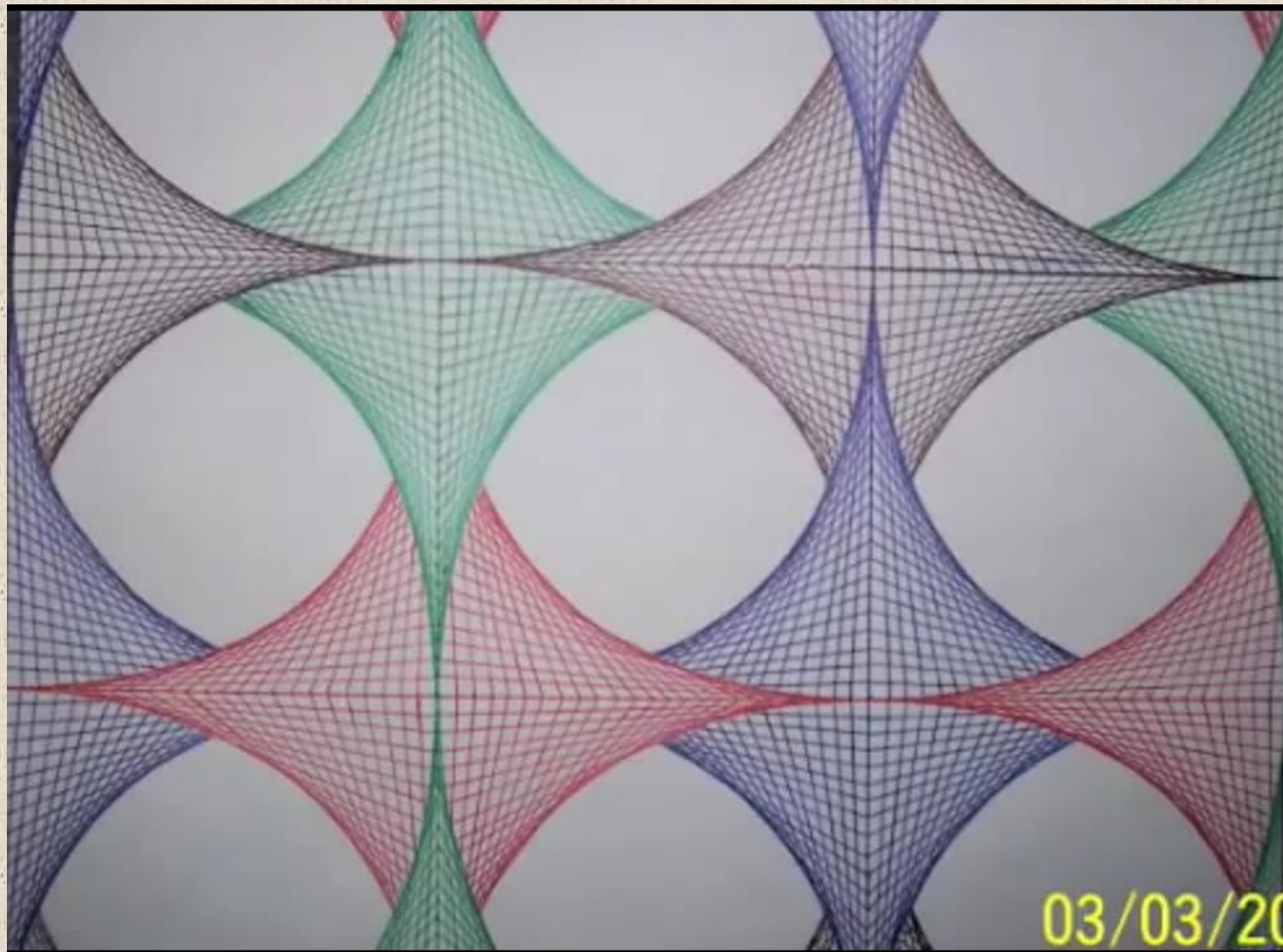
Examples...



Examples...







Your line design will go in as a SMALL grade...

- Your grade will be based on:
- **Precision/neatness**
- **Coloring your design (not lazily)**
- **Your design being not too simple.**
- **RUBRIC (tomorrow)**

Before you start making your own...

- You must complete the “Line Designs Intro Worksheet”
- Once you finish the worksheet, you can turn it in, then get a white piece of paper from the table and start your own design!

TIPS FOR GOOD LINE DESIGNS

• **PRECISION**

- Smaller dots = better
- Color carefully – use an interesting color scheme and not just solid blocks of color

Reminders...

- **PLEASE PUT YOUR RULERS AWAY EVERY DAY THIS WEEK!**
- **If you take three colored pencils, you must put three colored pencils back.**
- **You may check out a mechanical pencil using your ID or something else you need back.**
- **Bring colored pencils from home if you have some.**