

First Construction C1: Polygon Tiles

tools

pencil

pen

ruler

compass

colored pencils

packing tape

scissors

paper

pencil sharpener

products

equilateral triangle

square

golden rectangle

pentagon

Penrose tiles

small pentagon

hexagon

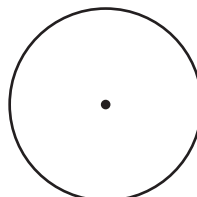
Begin
with a point:

a single dot drawn with a pen.

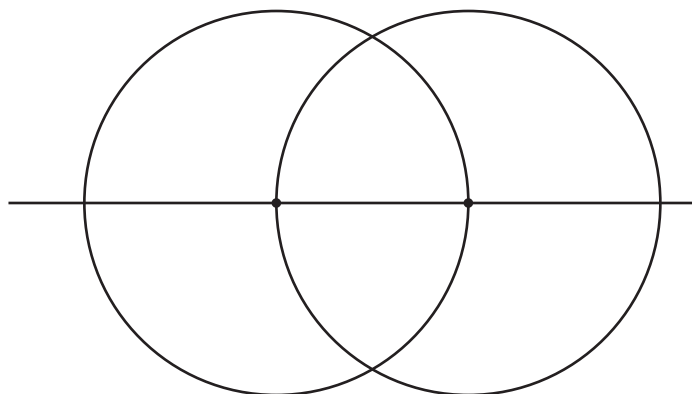
Then draw two, and draw a line
through them:



Now draw another point, draw a
circle around it with the compass,
and ink over it with a pen to make it
dark:

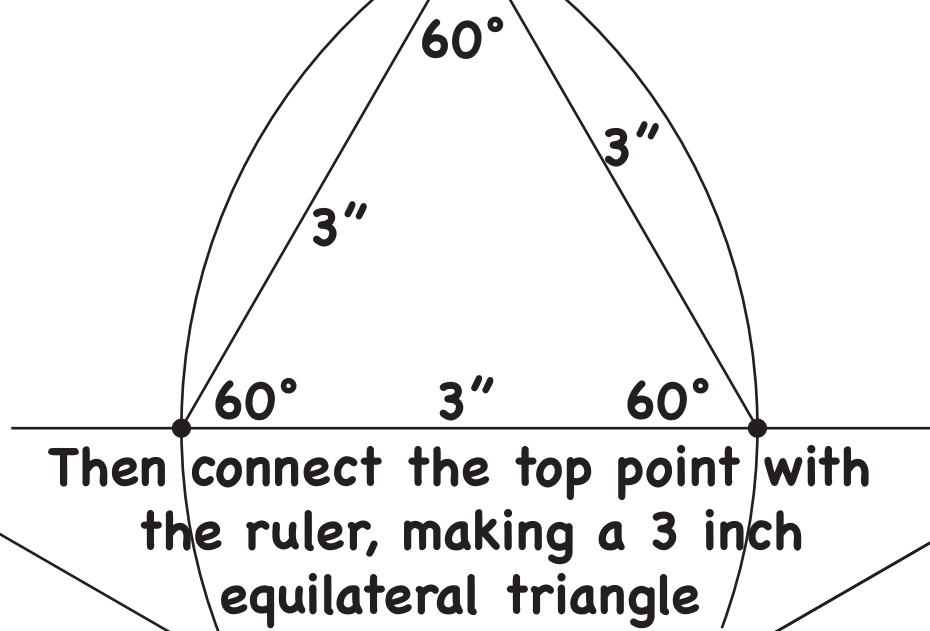


combine these
to make 2 circles that
intersect each others' centers



This figure is called a vesica pisces,
and is both very useful
and of symbolic
significance

Construct
another vesica pisces,
now with exactly 3 inches
between center points:



Then connect the top point with
the ruler, making a 3 inch
equilateral triangle
to cut out and
lamine

start
with another
3 inch vesica pisces
and construct perpendicular line

3"

3"

finish the square with
3 inch circles

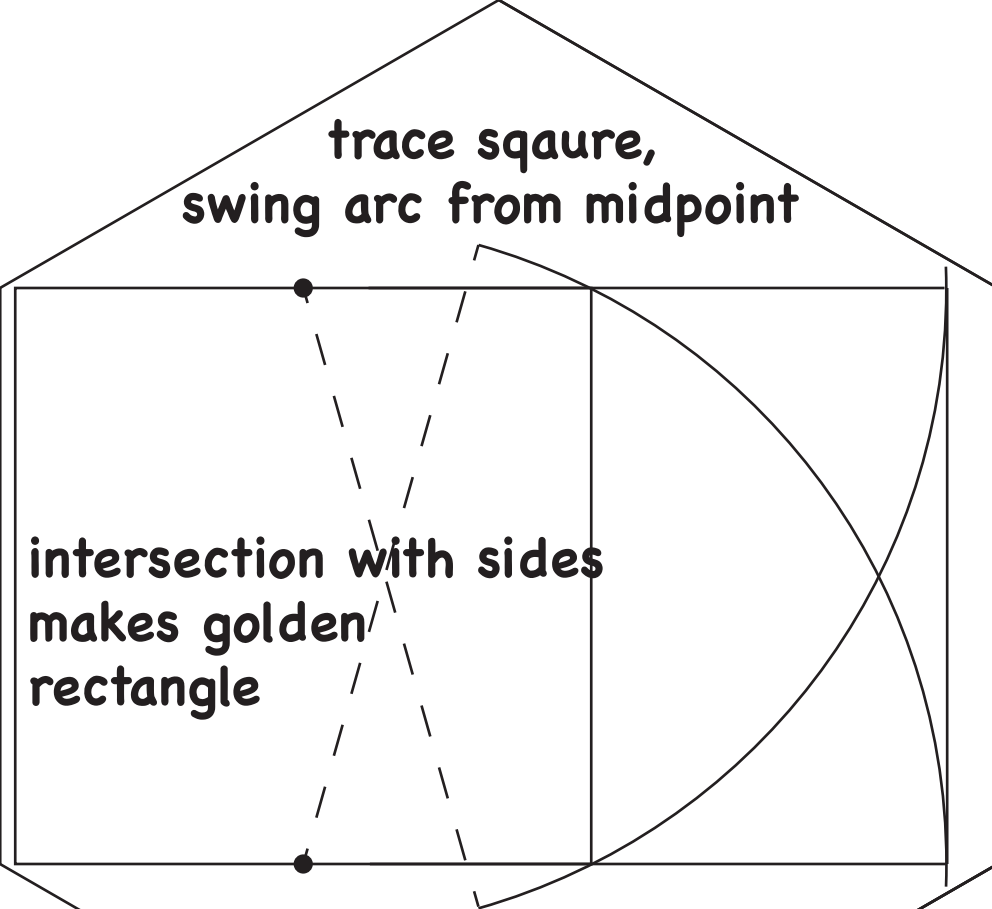
90°

3"

cut out
and laminate

trace square
and bisect twice to
get half squares

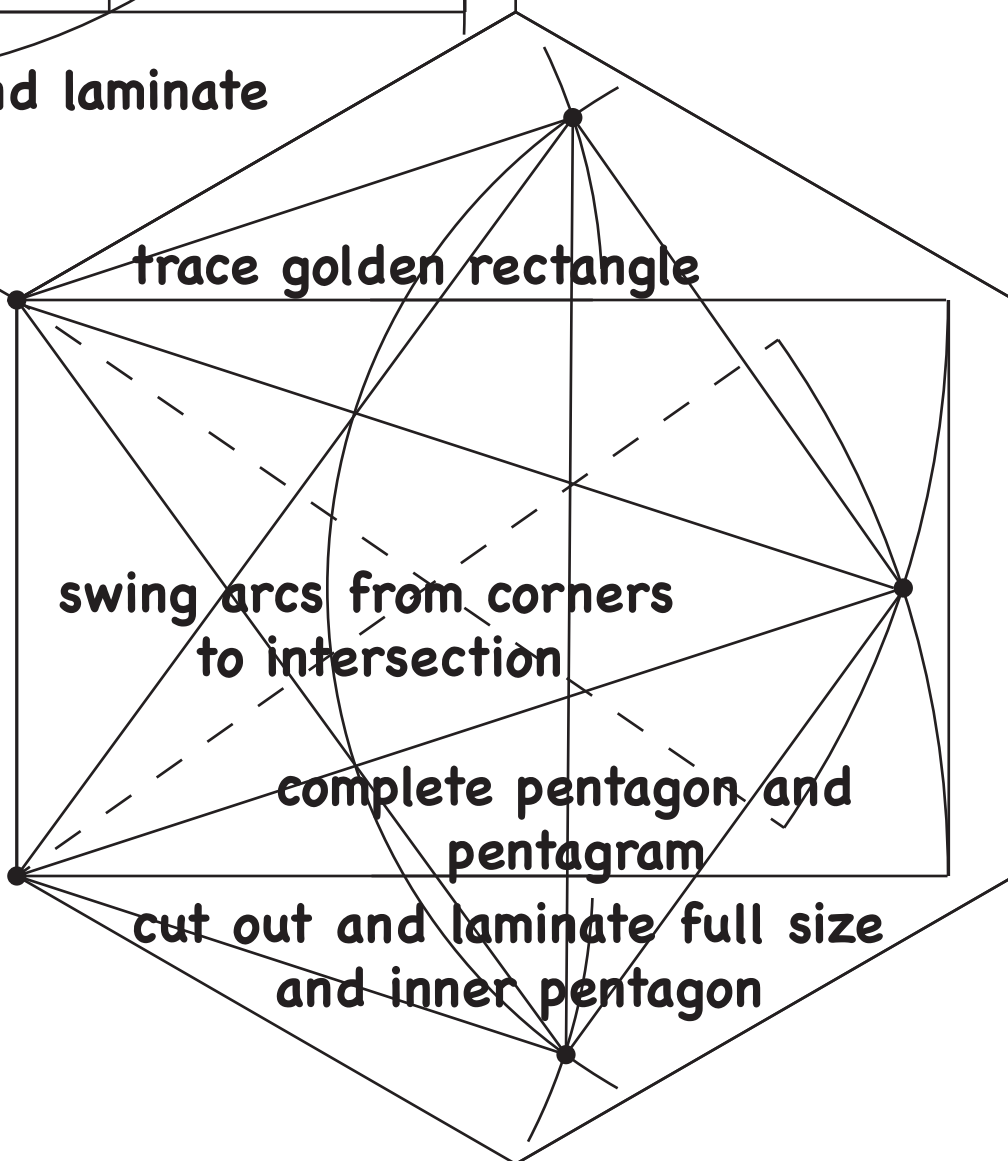
cut out
and laminate



trace square,
swing arc from midpoint

intersection with sides
makes golden
rectangle

cut out and laminate

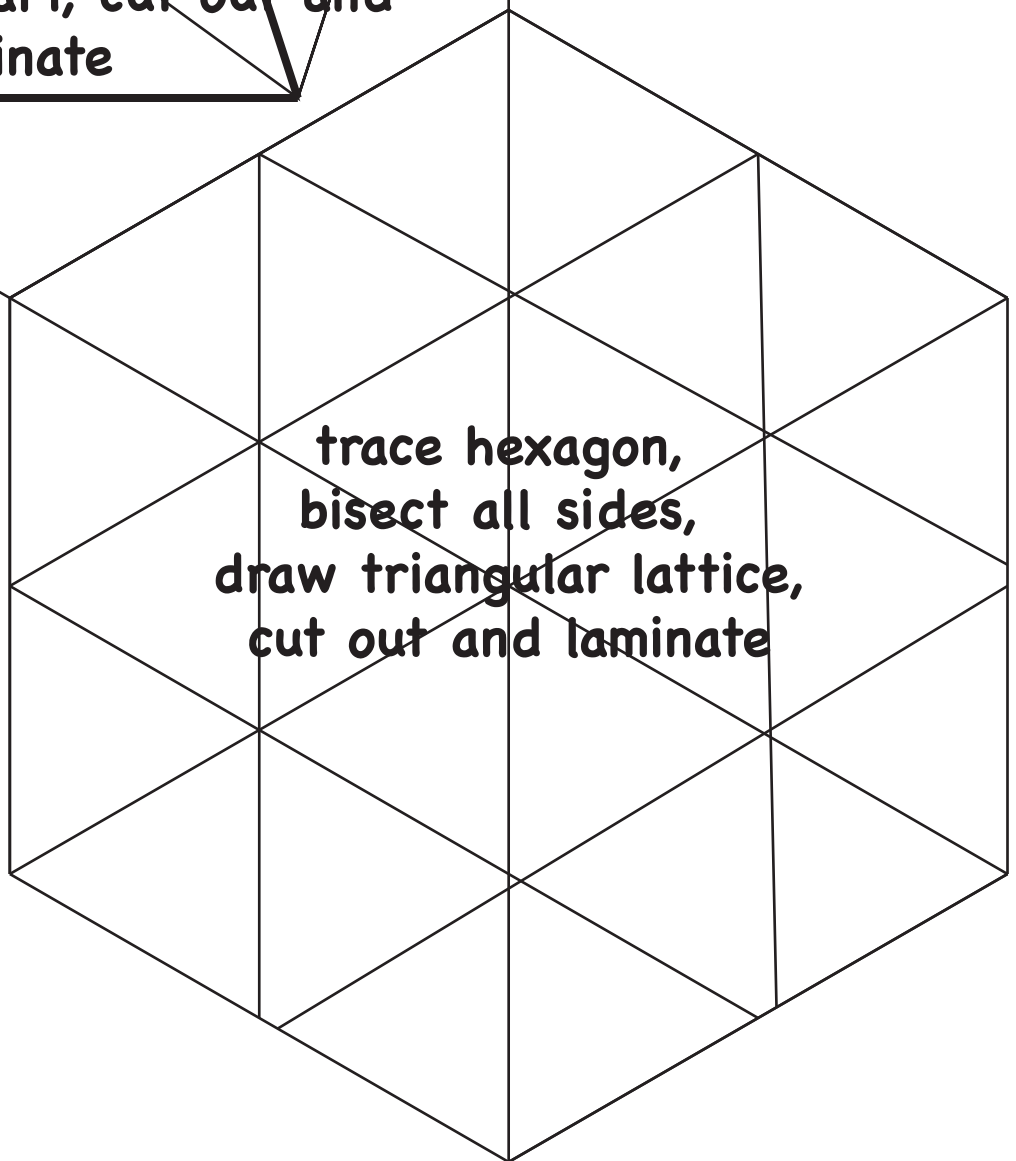
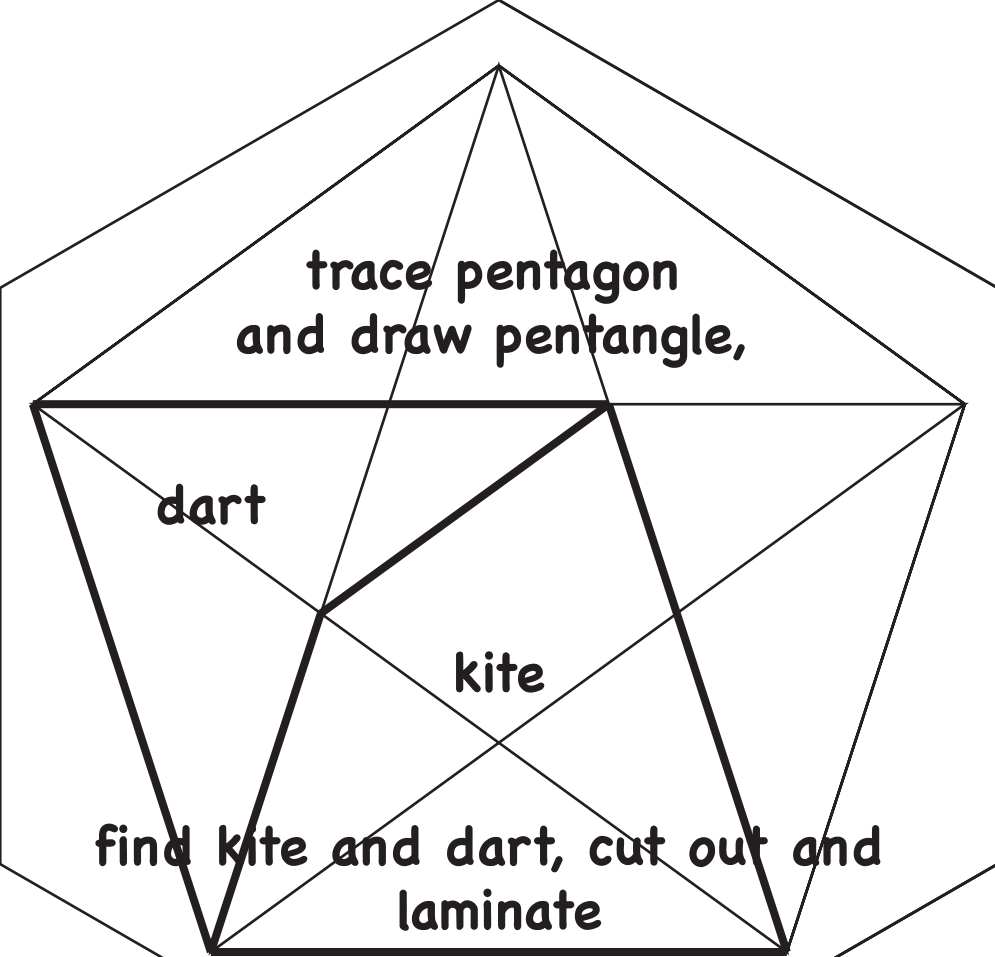


trace golden rectangle

swing arcs from corners
to intersection

complete pentagon and
pentagram

cut out and laminate full size
and inner pentagon



Second Construction C2: Platonic Solids

tools

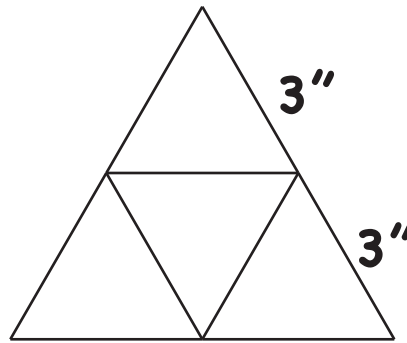
pen
ruler
packing tape
scissors
paintbrush
paint
cereal boxes
scoring point

products

tetrahedron
cube
octahedron
icosahedron
dodecahedron
templates for all

C2-1

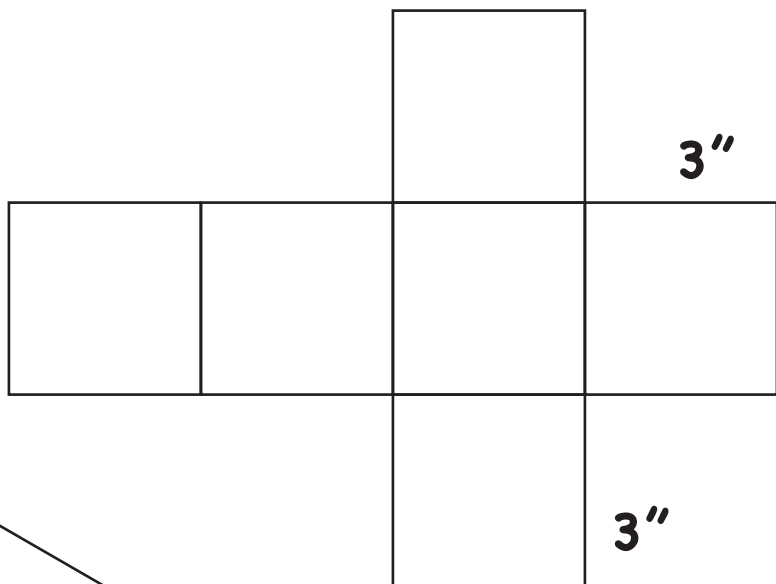
trace out
tetrahedron net with
3 inch triangle, color,
cut out and laminate



exactly 3 times the size of figure

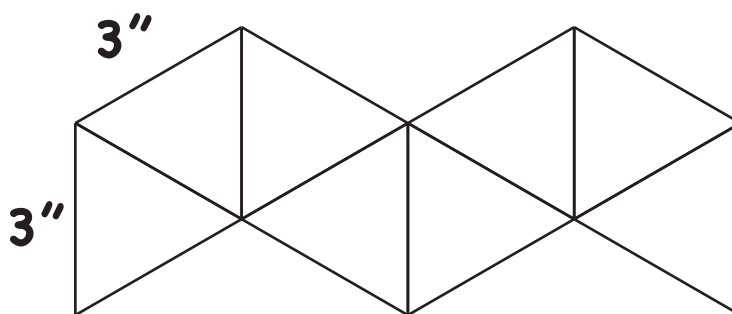
C2-2

**trace out
cube net with
3 inch square, color, cut out,
and laminate**



C2-3

**trace out
octahedron net with
3 inch triangles, color,
cut out and laminate**



C2-4

