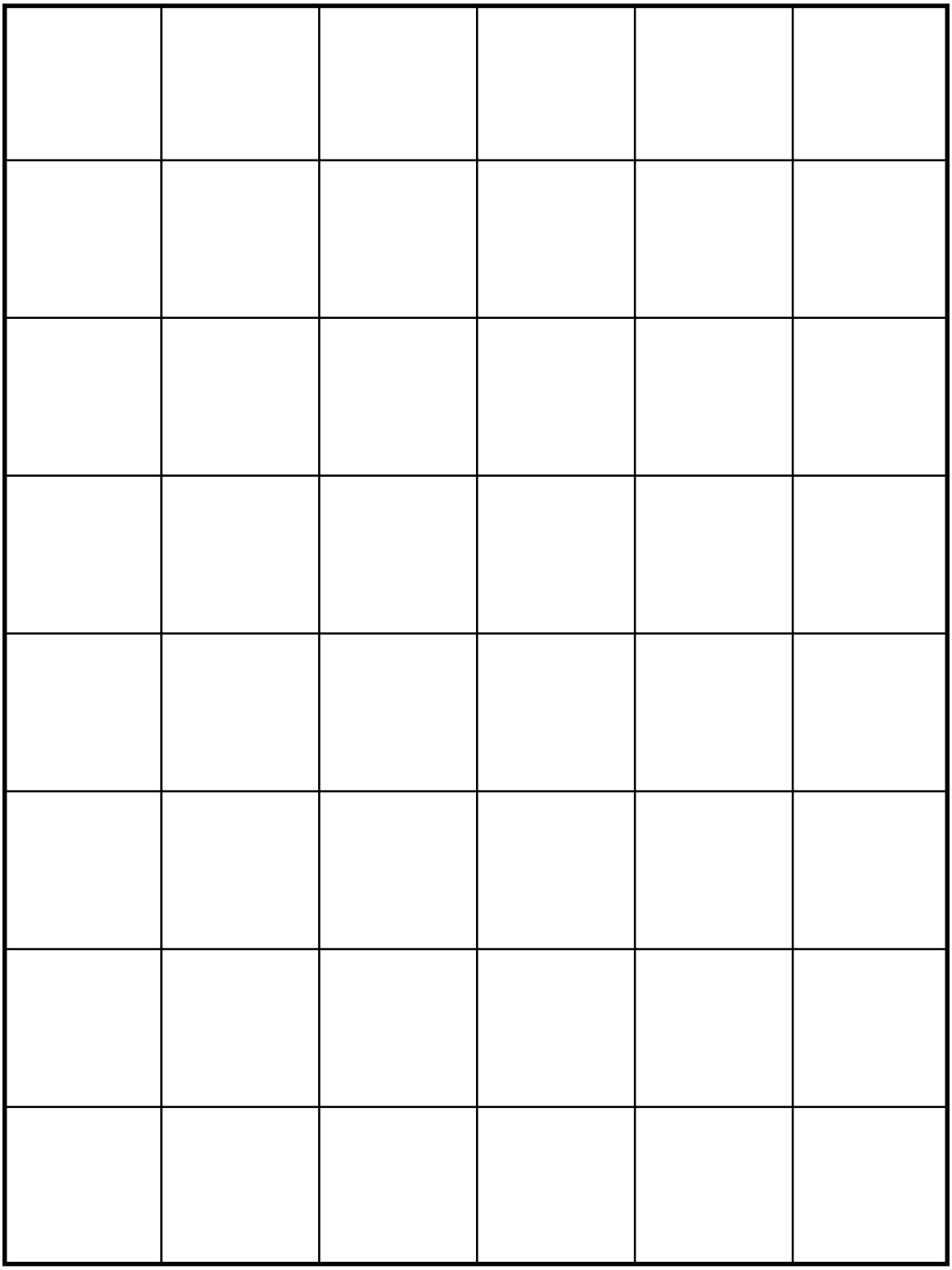
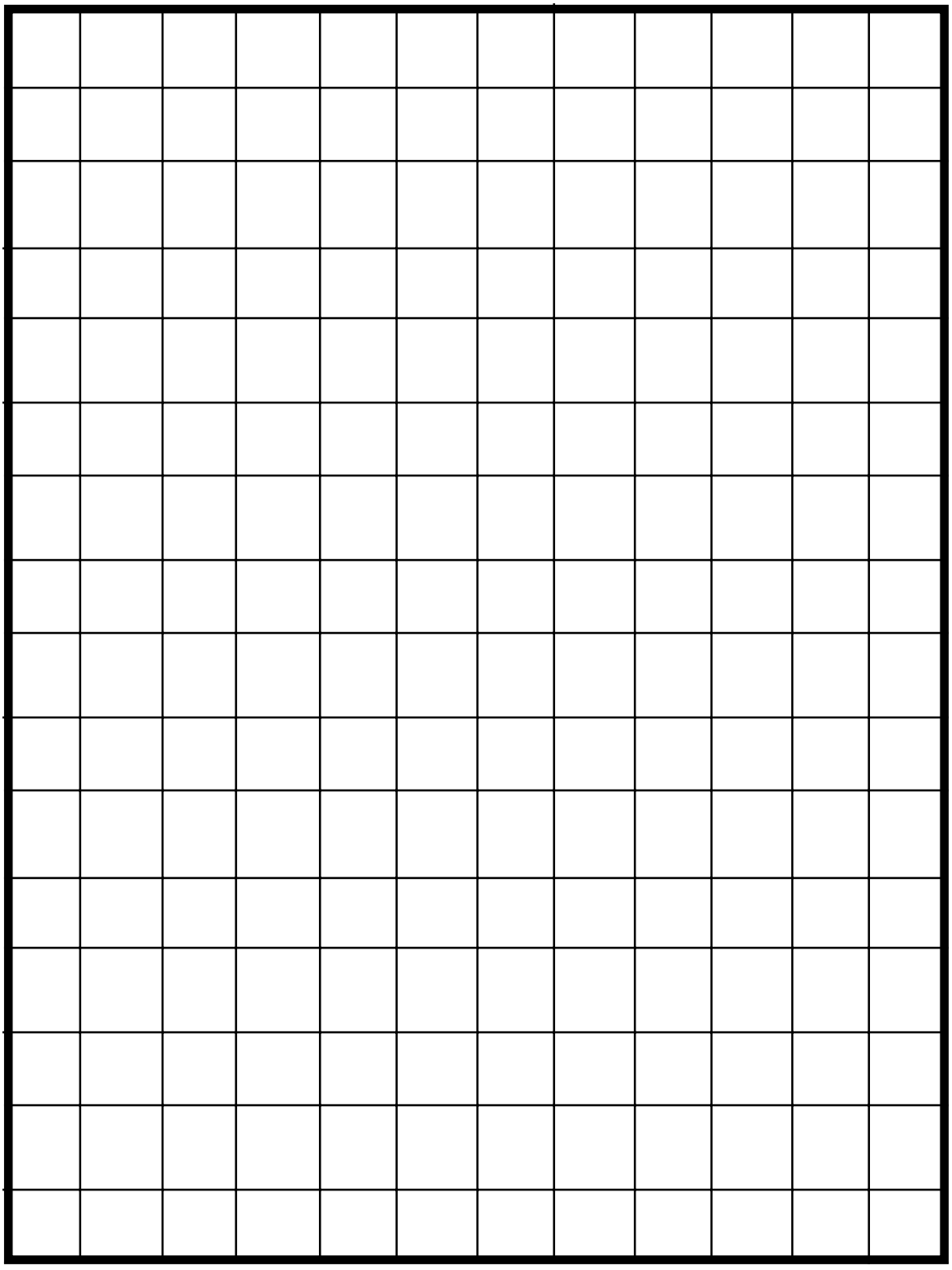
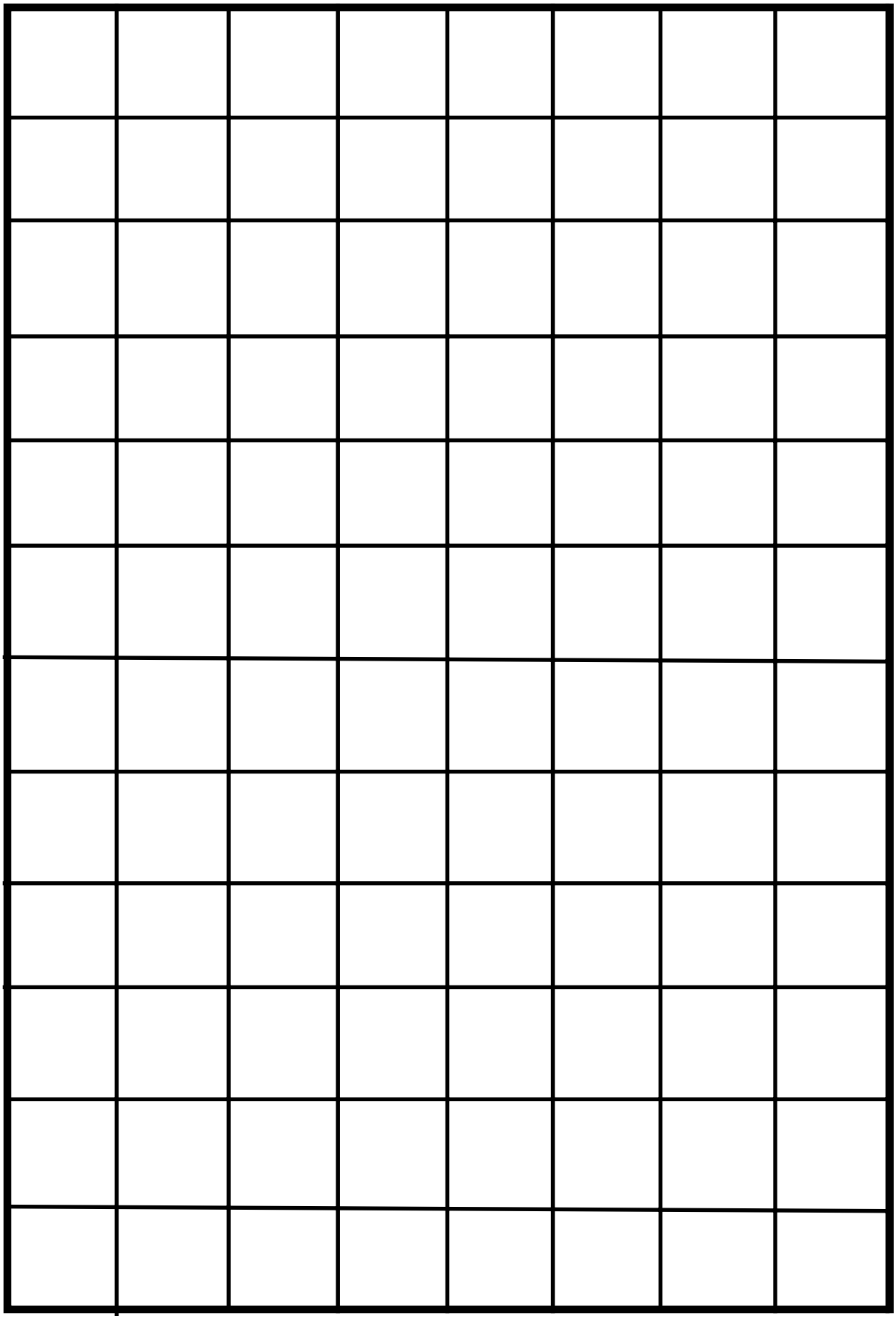
One-Inch Graph Paper



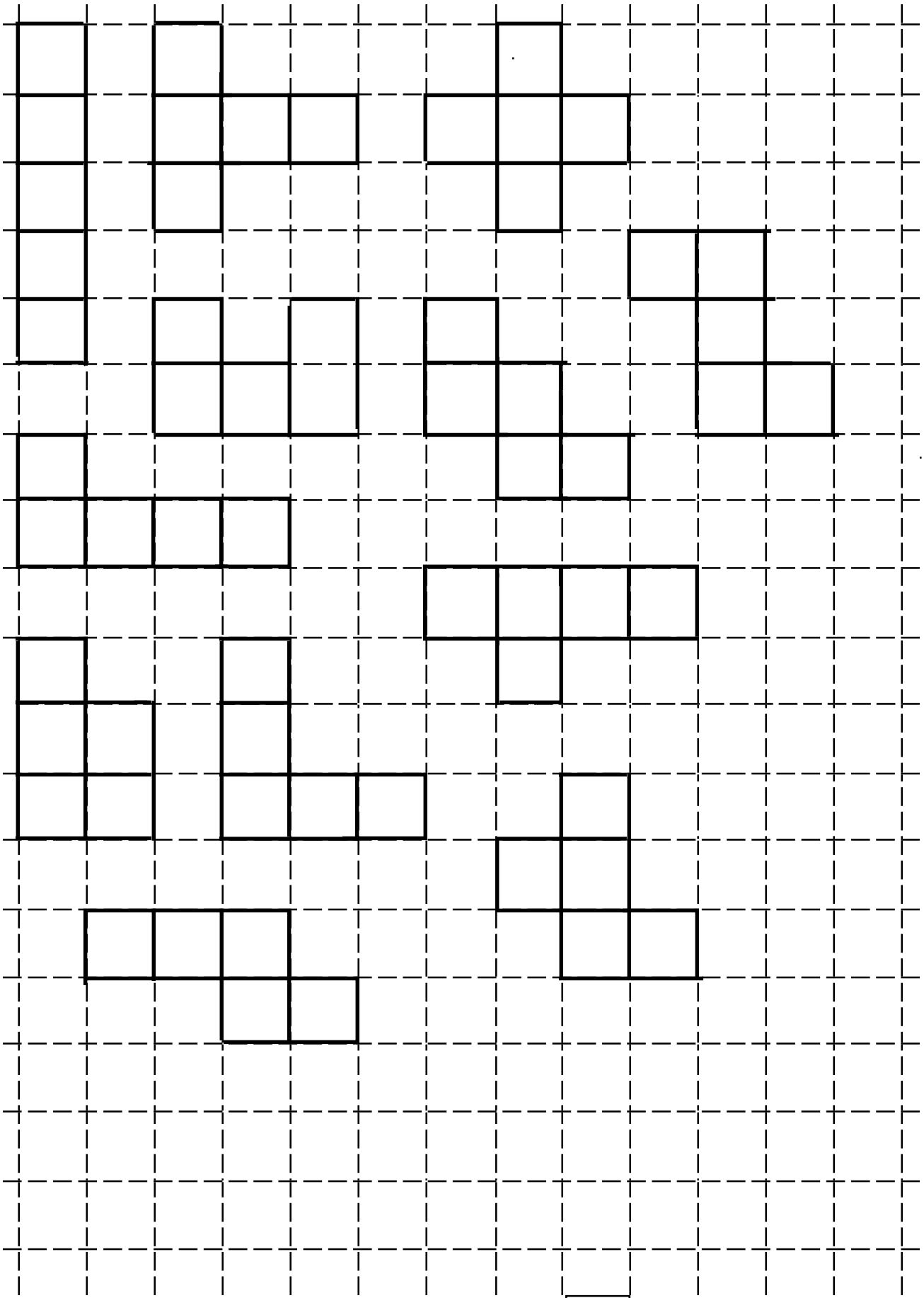
Half-Inch Graph Paper



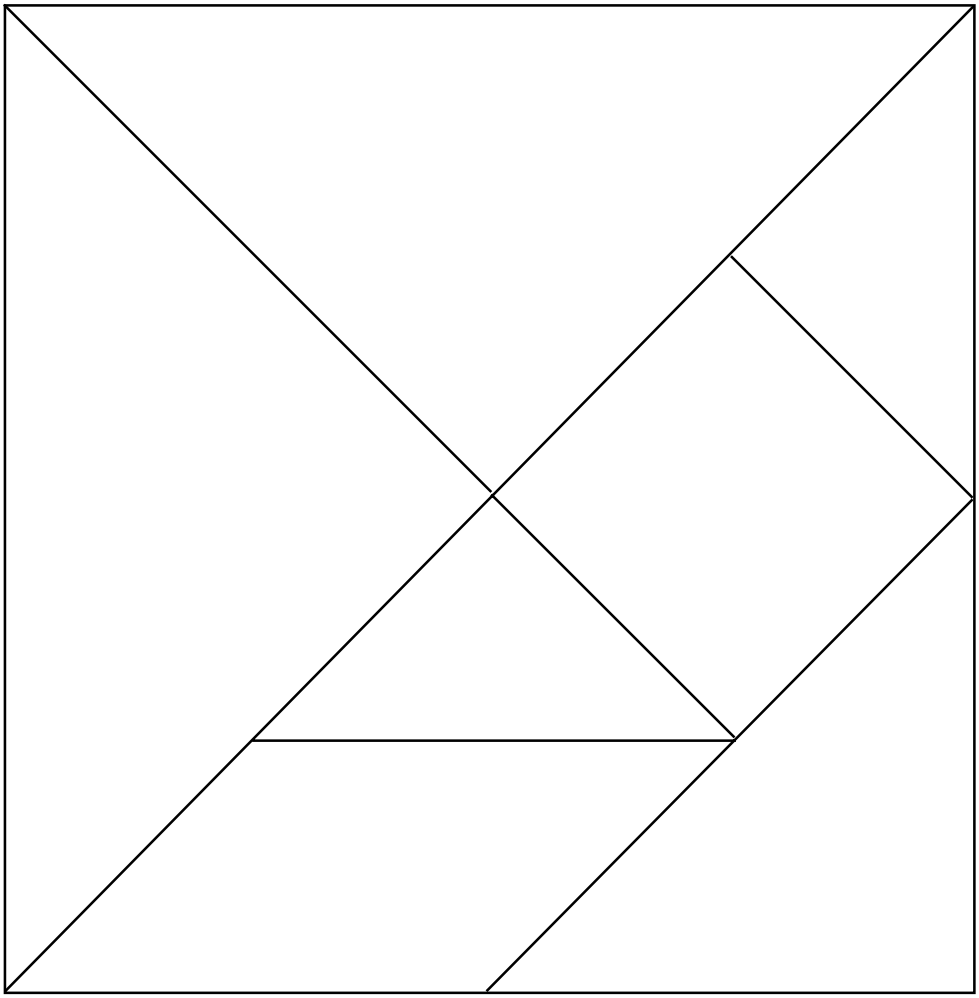
Two-Centimeter Graph Paper



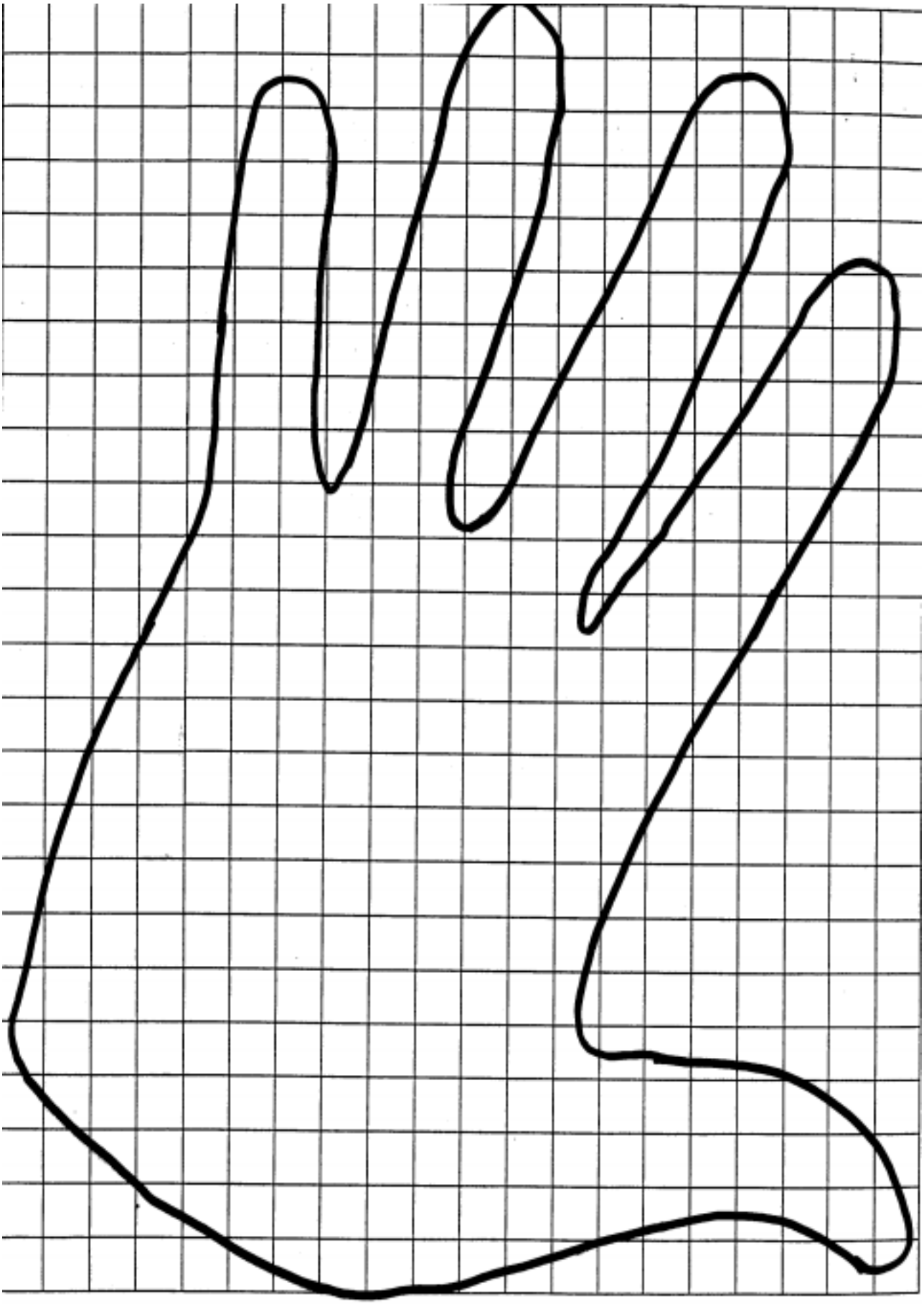
PENTOMINOES



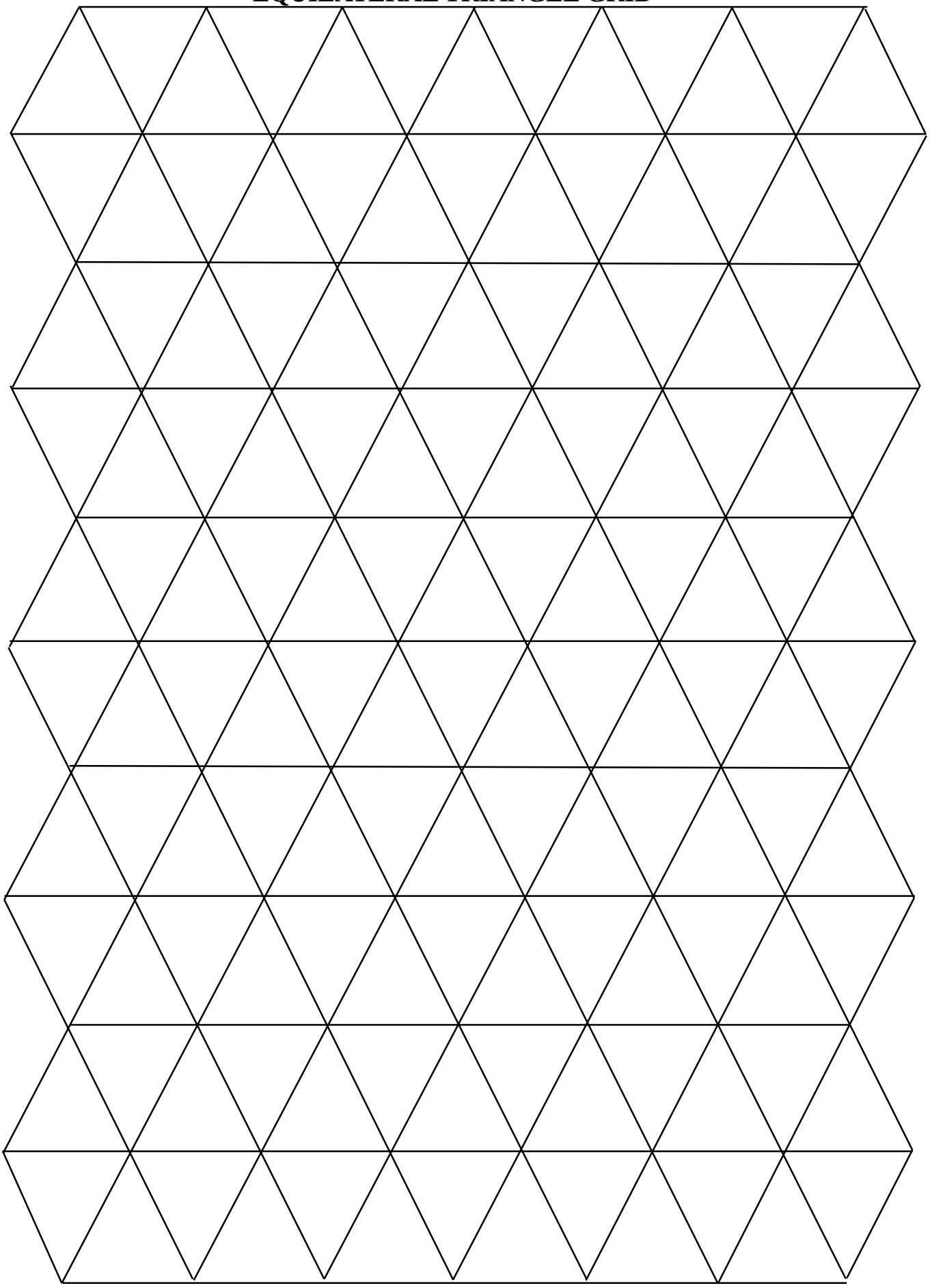
TANGRAM



Michael Jordan's handprint

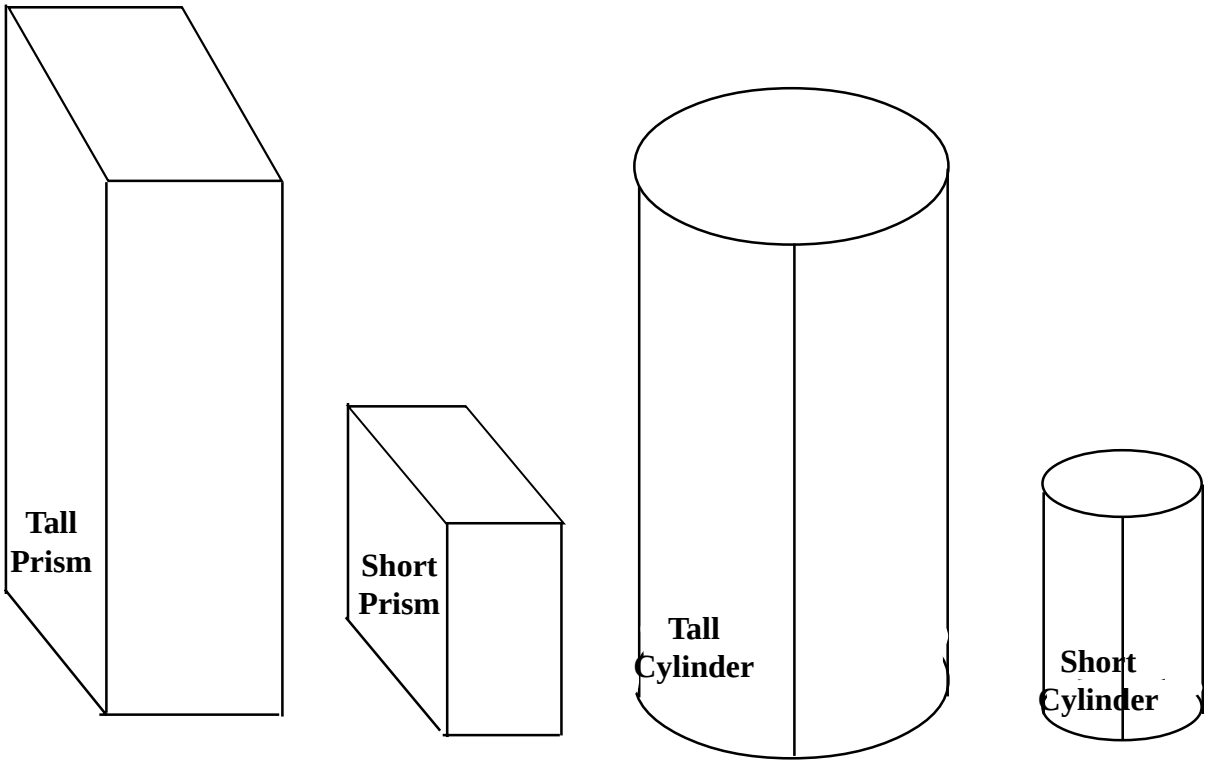


EQUILATERAL TRIANGLE GRID



SQUARE GRID

WHICH HOLDS THE MOST?

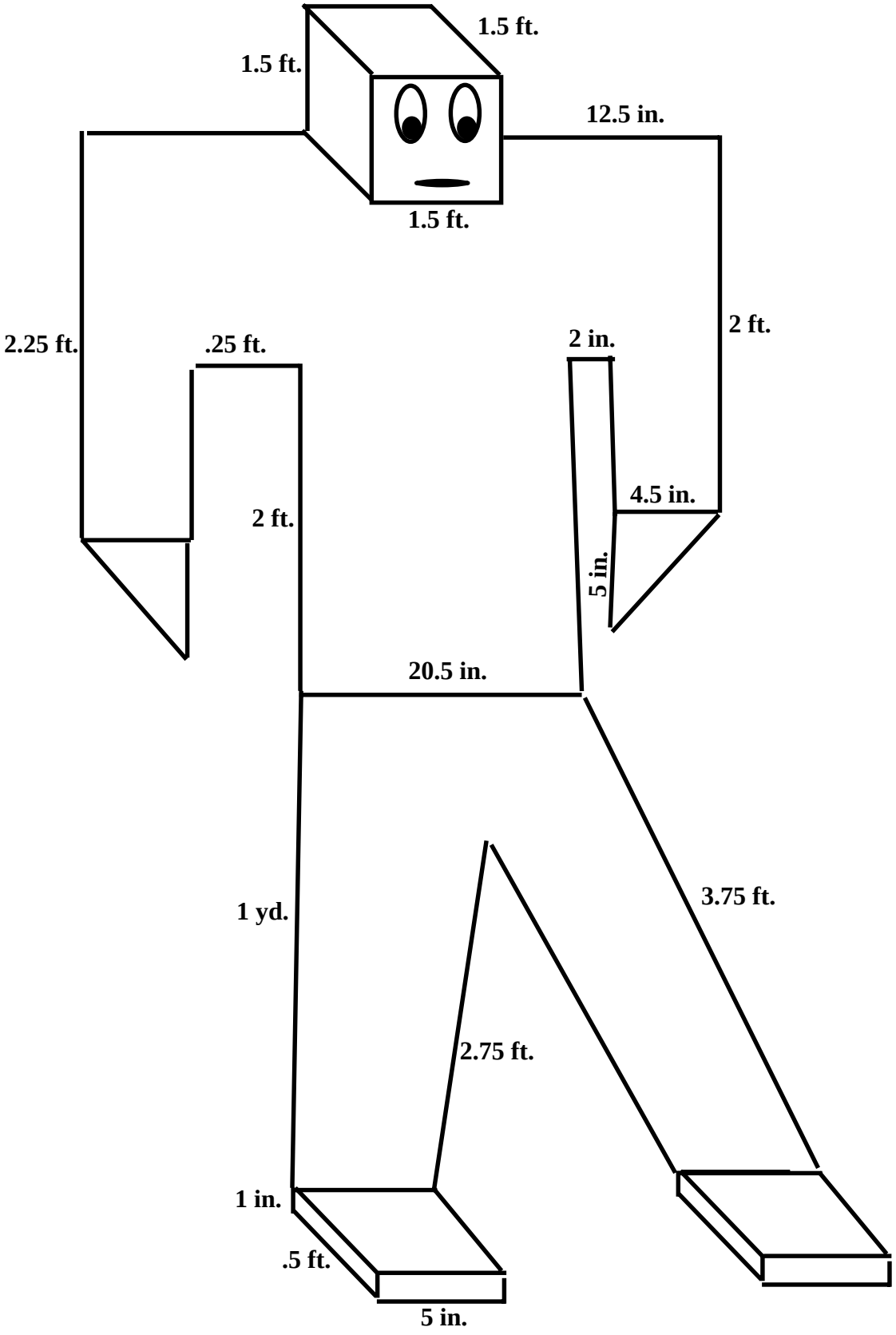


Using four sheets of paper, all the same size,make these four containers. As a group, estimate which has the largest capacity (volume).

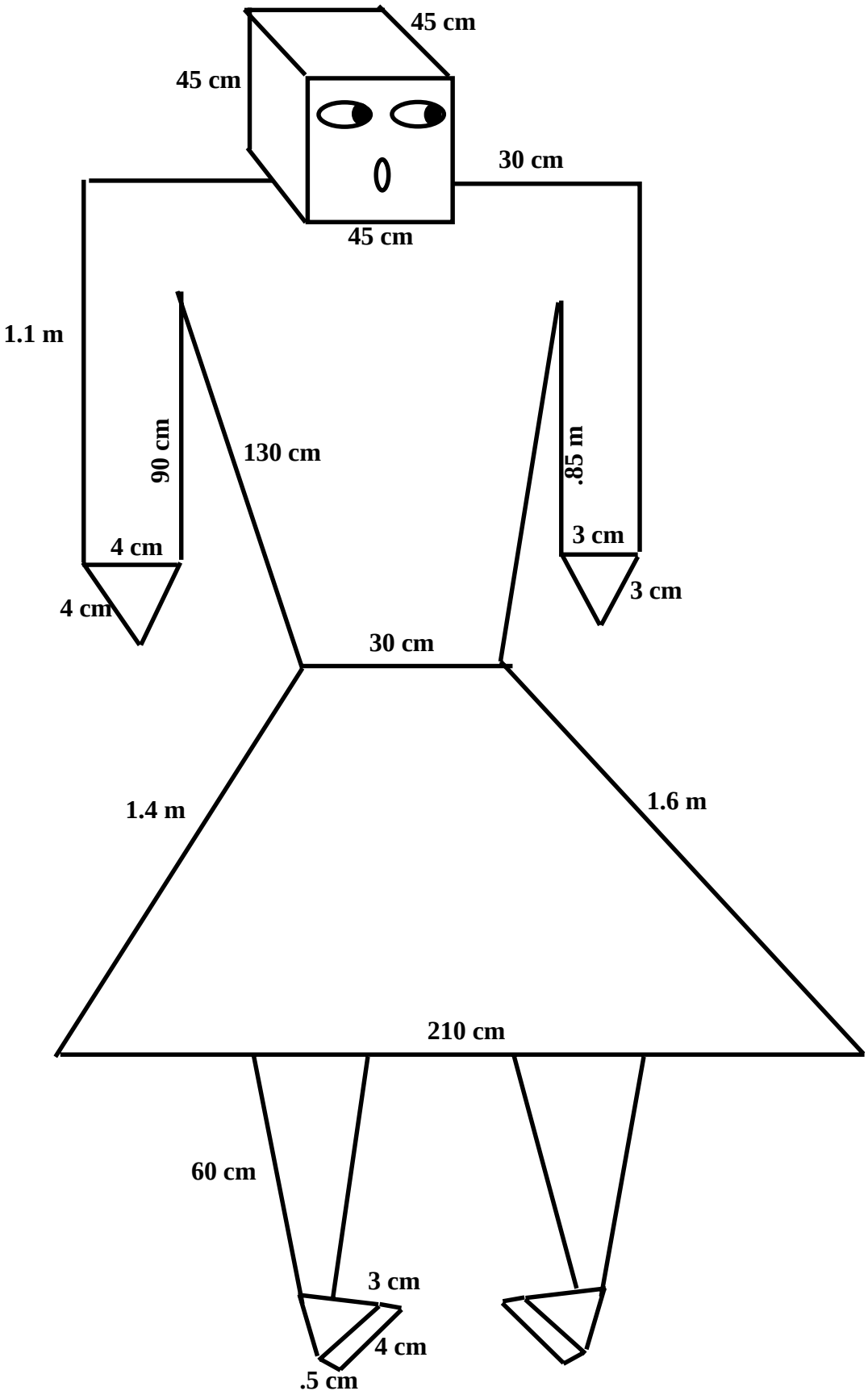
We think the _____ has the largest capacity because:

Design an experiment to compare the capacity of each container. Explain your group's experiment. Describe your procedure and defend your conclusion.

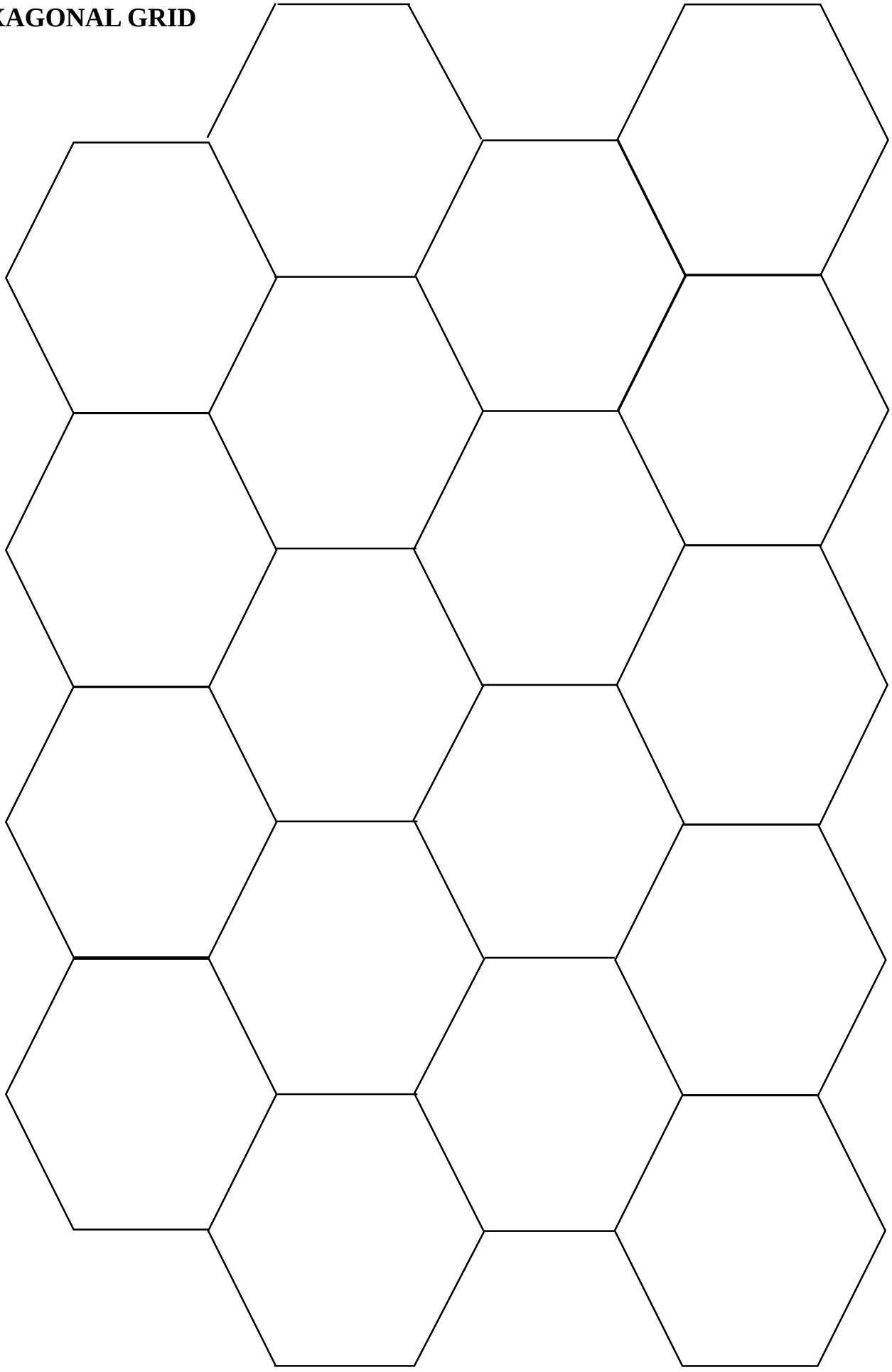
BLOCK BOY



BLOCK GIRL

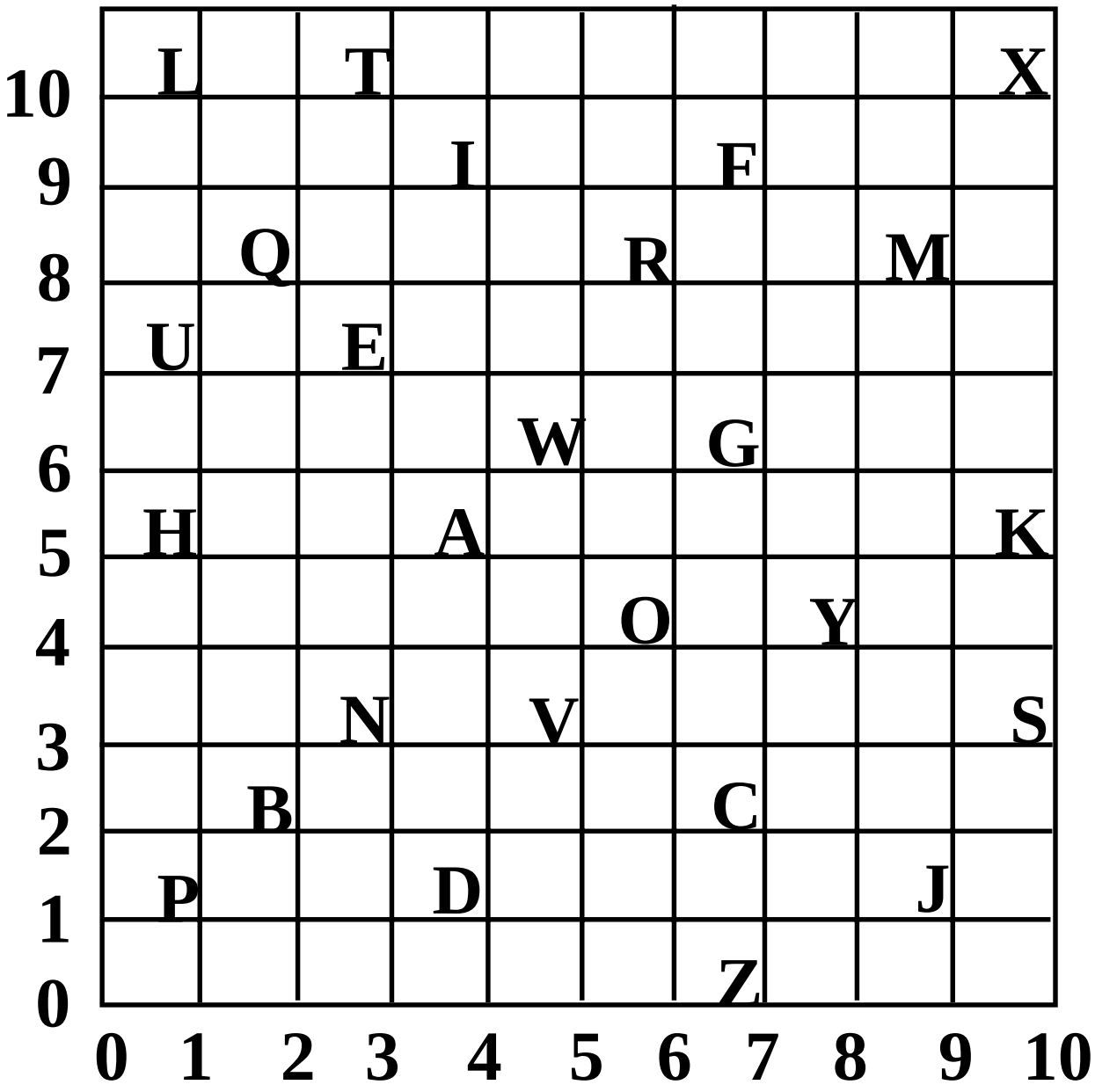


HEXAGONAL GRID



Name _____Date ___/___/___

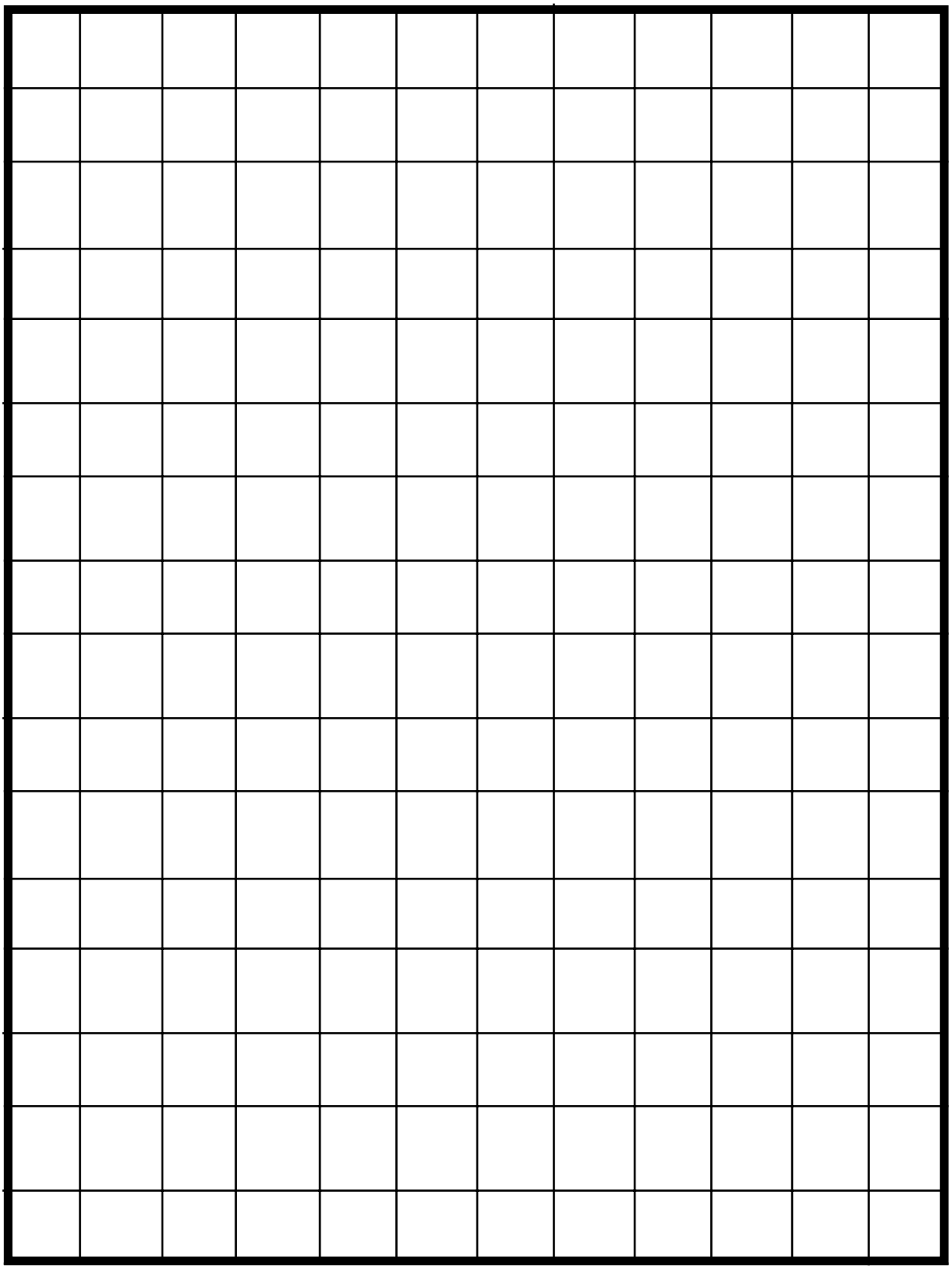
Secret Code Grid



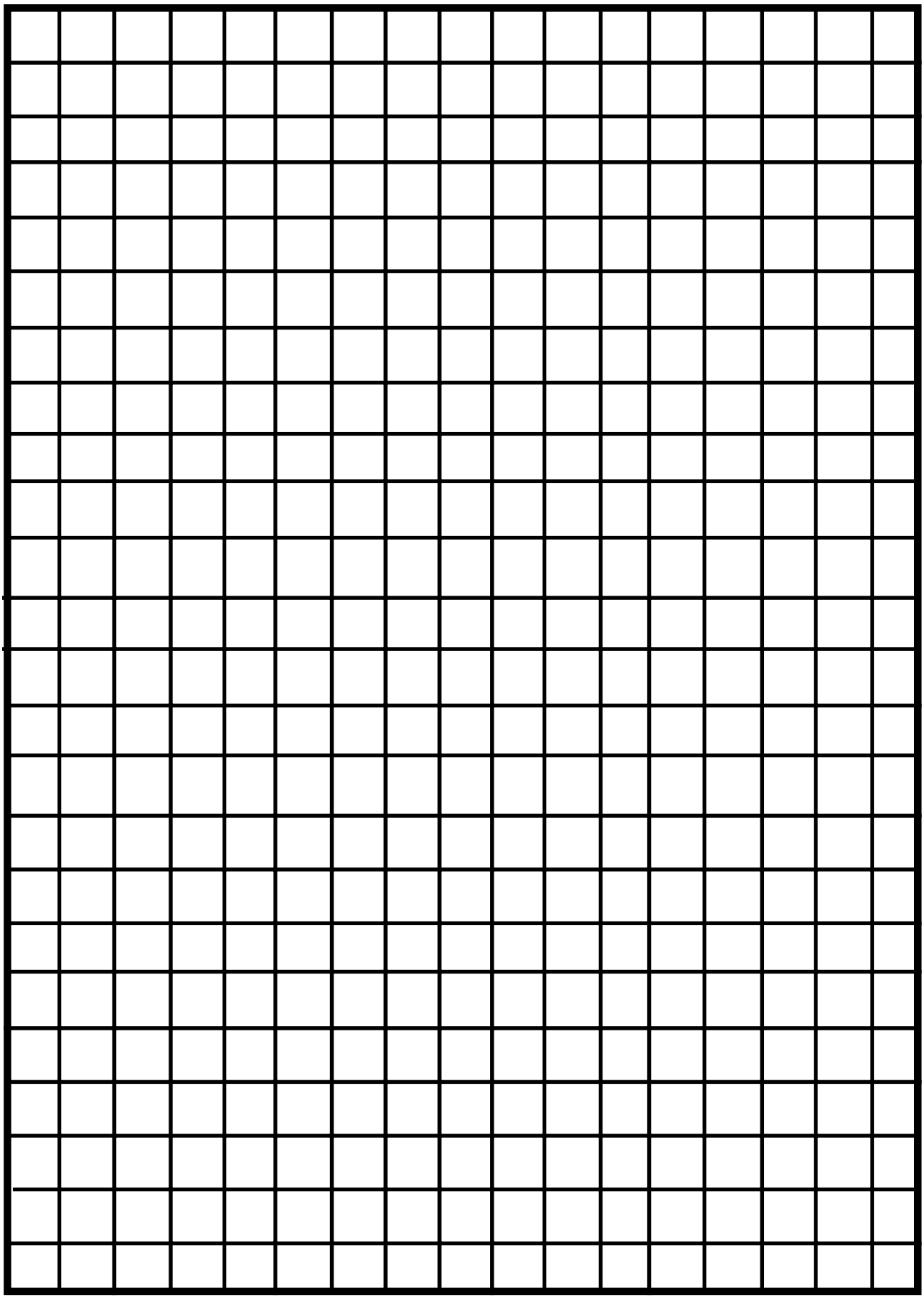
What is the code for your friends name? Try writing a secret message for a friend.

Name _____**Date** ___/___/___

Half-Inch Graph Paper

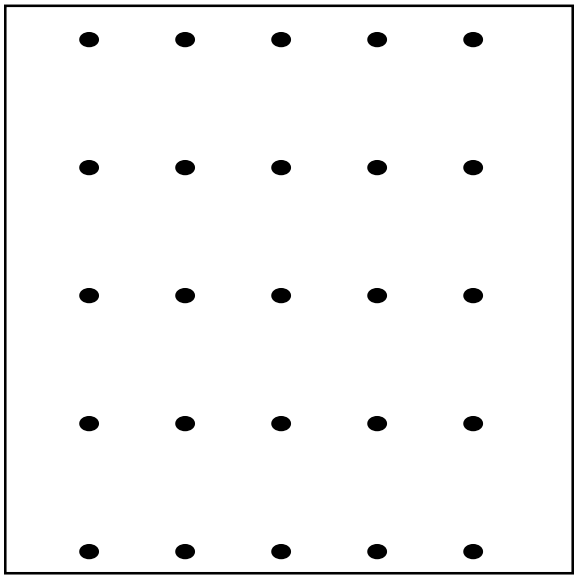


One-Centimeter Graph Paper

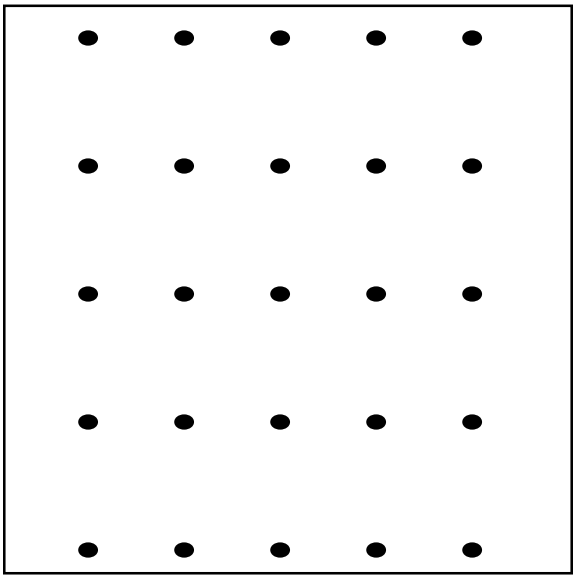


Name _____ **Date** ___/___/___

4.



1.



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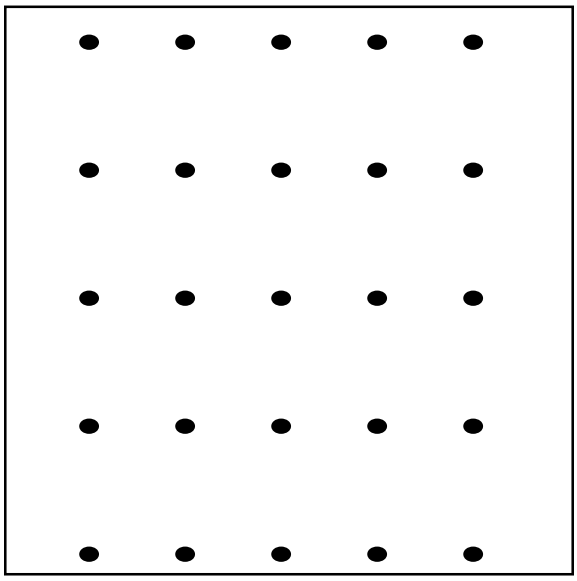

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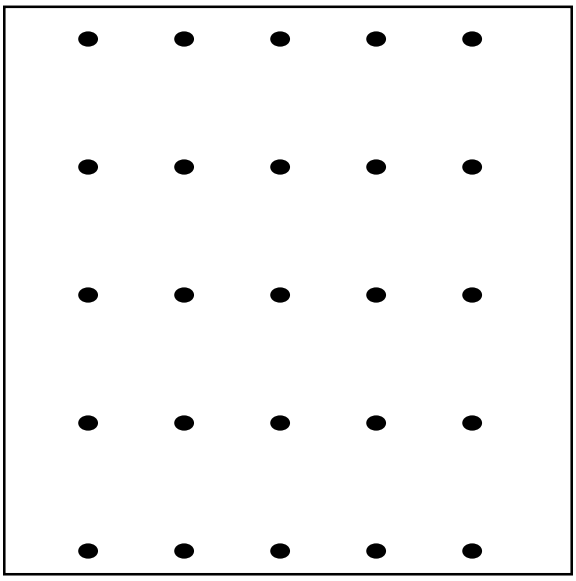
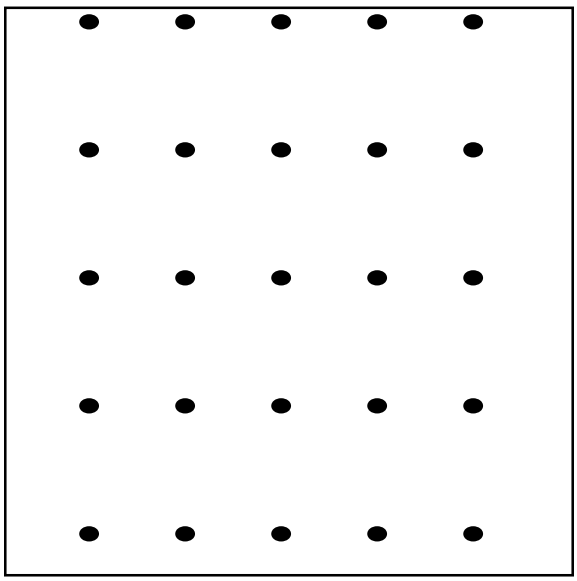
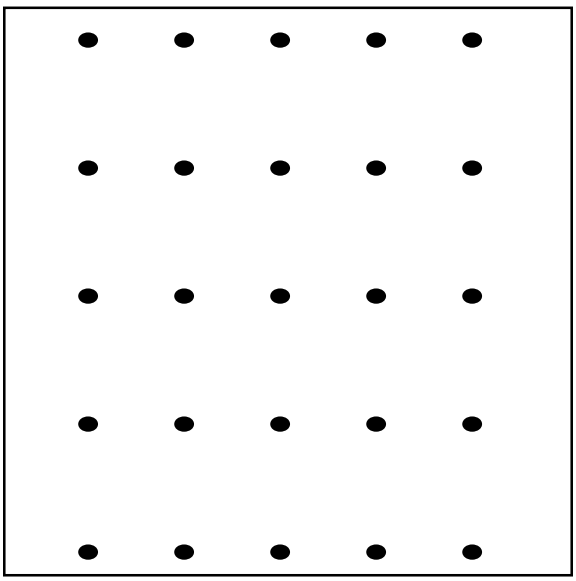


6.



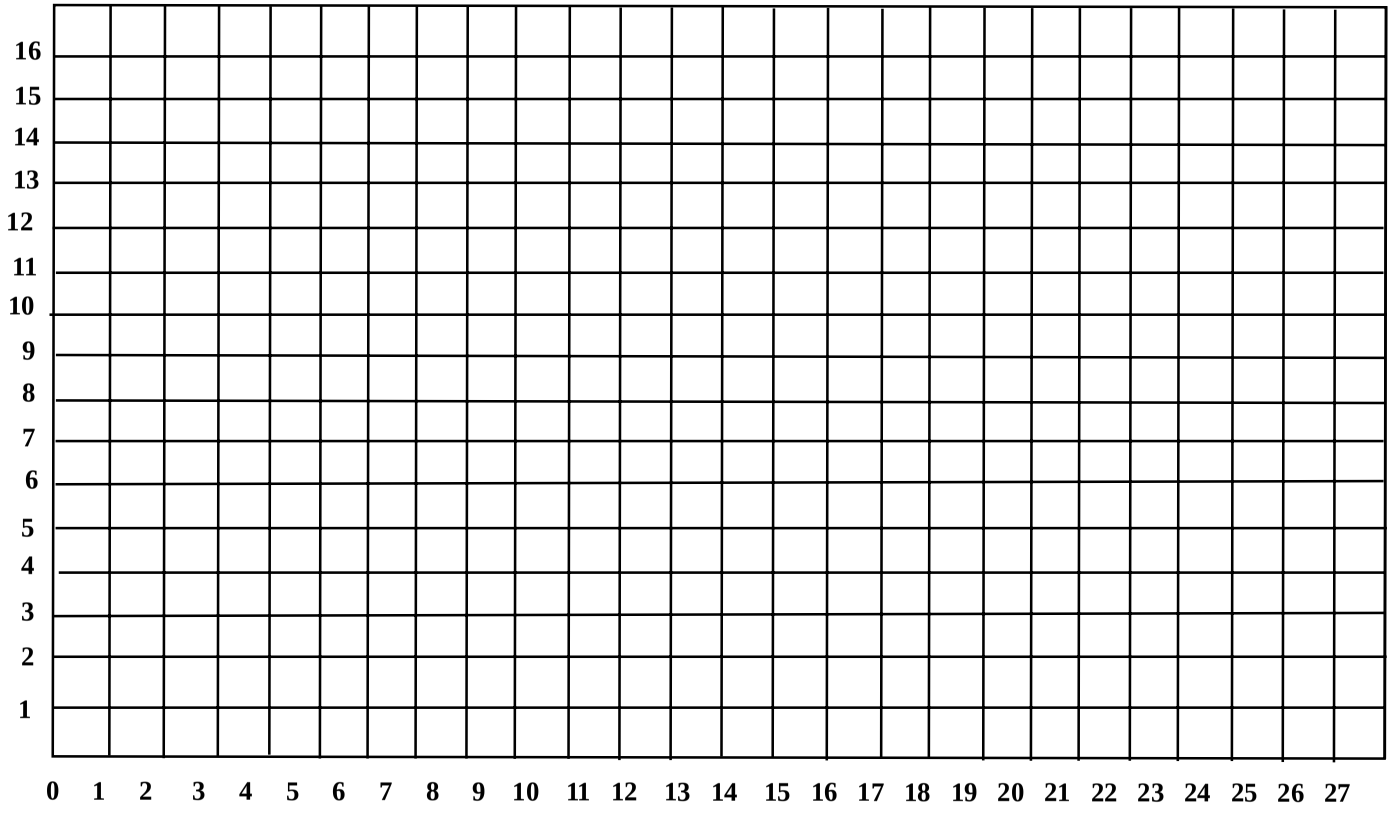
3.



Name _____ Date ___/___/___

Using Coordinates

A. Connect these points in order. What picture do you see?
(6,7) (17 1/2, 7) (18, 6) (18 1/2, 4) (16 1/2, 2) (15, 2) (14, 1) (12 1/2, 0) (8, 2 1/2) (8, 3) (5, 3 1/2) (4,3) (0, 3) (0, 3 1/2) (5 1/2, 6) (6, 7)



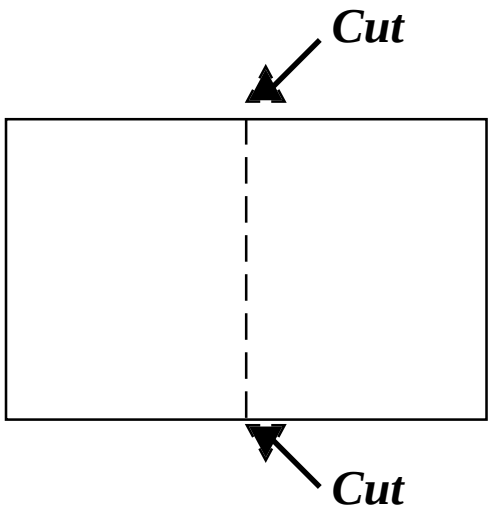
B. Use your own graph paper to see what happens when you multiply each number in the pairs above by 2.

C. What happens when only the first numbers of the ordered pairs are multiplied by 2?

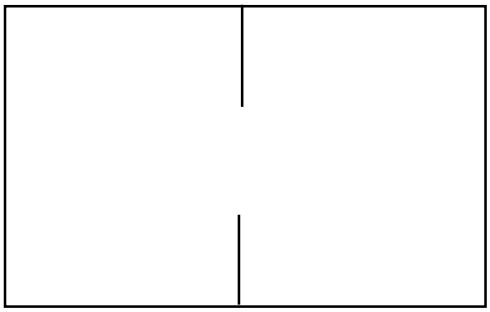
D. What happens when you double the second numbers of the ordered pairs?

Direction for Making Burrito Books

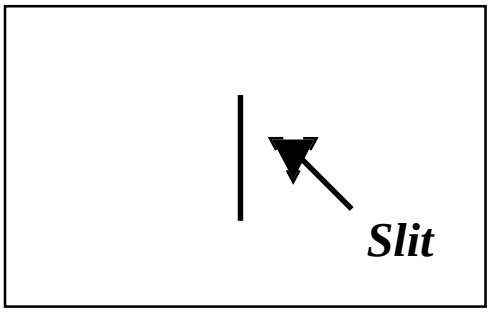
Fold paper in half. Cut on the fold. Fold each half again (short side together).



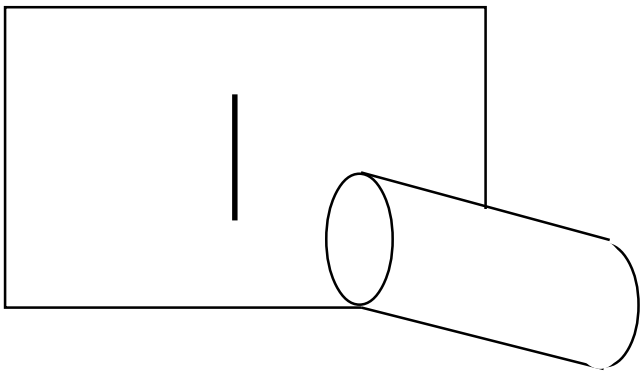
Take one piece and cut on fold 1/3 down from the top and 1/3 up from the bottom leaving the center 1/3 uncut.

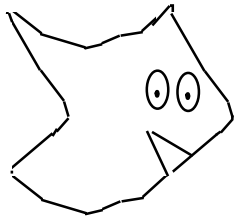


Take the other piece of paper and slit the center 1/3 on the fold.



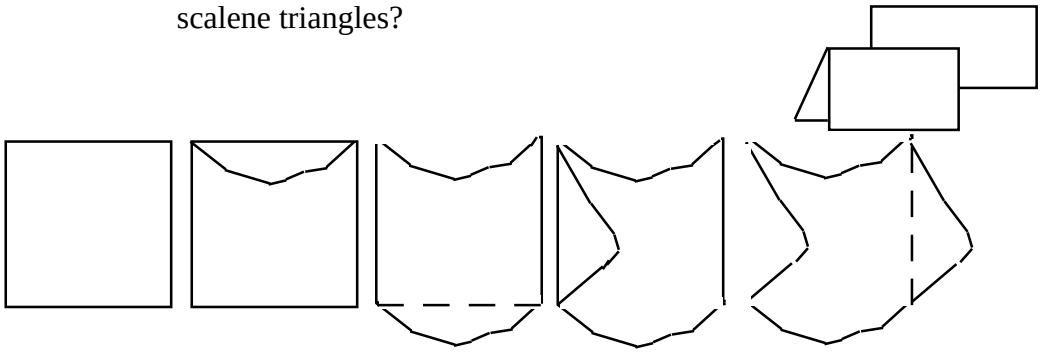
Roll the first piece of paper so it fits through the slit and... whoop! There it is!





Tessellation Originals

You can create note paper, postcards, wrapping paper, and pictures for many purposes with original tessellations. Here are the basic steps you need to follow. Experiment with squares, rectangles, triangles, and other shapes which will tessellate. Why are equilateral triangles easier than scalene triangles?



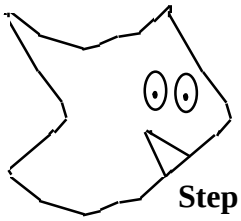
Step 1. Start with a shape which will tessellate, for example a square. (A shape will tessellate if the sum of the angles is a multiple of 180).

Step 2. Draw a simple squiggly line from corner to corner along one side Cut out the shape.

Step 3. Slide (translate) the shape to the opposite side and tape into place. Be very careful to attach the corners. Trim off excess tape.

Step 4. Repeat the process using the remaining two sides.

Step 5. Place this new shape on the notepaper, postcard, wrapping paper, etc. and trace around it. Slide the shape to a new position fitting into the outline of the first tracing. Trace around the shape over and over until the paper is covered (tiled).



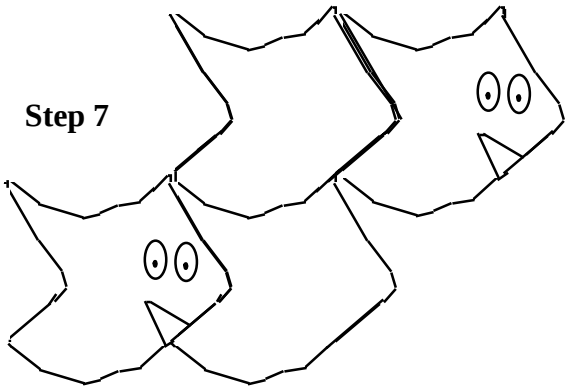
Step 6

Step 6. Look at the tiling-turn (rotate it, squint at it - what could it be?

Step 7. Add in the features and details.

Step 8. Add color to your design and sign!

Step 7



Debugging: If your shape does not fit together like pieces of a jigsaw puzzle... check to make sure that pieces were not flipped while being translated to opposite sides.

A Problem Solving Guide

1. **Read the problem twice.**
2. **Draw a picture.**
3. **Decide what the problem is asking.**
4. **Write a number sentence.**
5. **Does the picture match the number sentence?**
6. **Solve the problem.**
7. **Does the answer make sense?**
8. **Read the problem one more time.**

A Problem Solving Guide

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STUDENT CENSUS

Name_____
First Middle Last

Date of Birth_____ **Age**_____
month day year

What country were you born in ? _____

Address _____
Street

_____
City State Zip Code

Telephone Number_____

Number of people who live at this address _____

Number of brothers _____ **Number of sisters** _____

Hair color _____ **Eye color**_____

Check one: ☐ **right-handed** ☐ **left-handed**

Circle the grades attended at this school K 1 2 3

How do you usually come to school? (Check one)

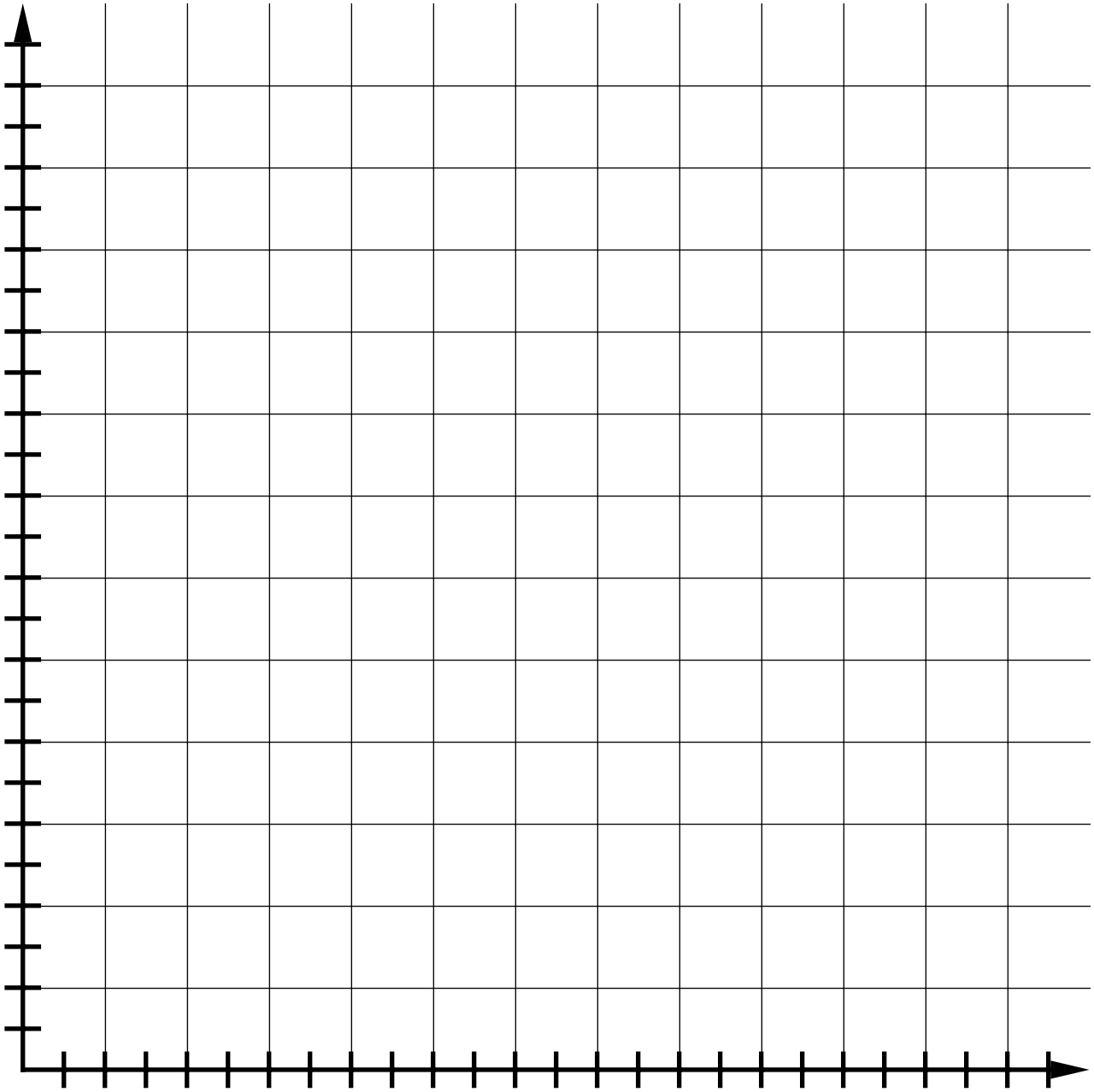
☐ **car** ☐ **bus** ☐ **walk** ☐ **bicycle** ☐ **other**_____

Circle your favorite subject. reading math science social studies

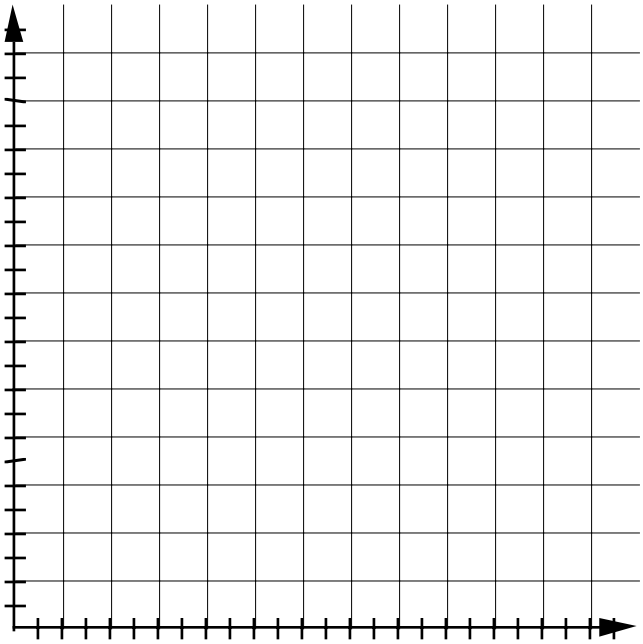
What is your favorite activity? (Check one)

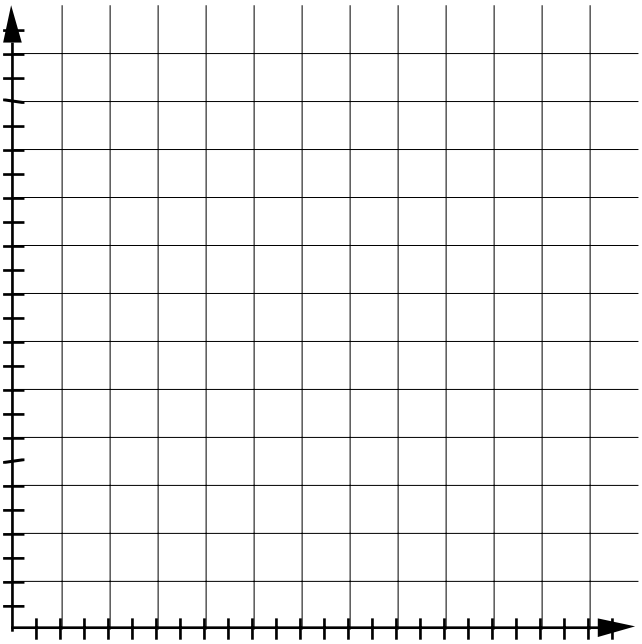
☐ **playing** ☐ **watching TV** ☐ **reading** ☐ **other**_____

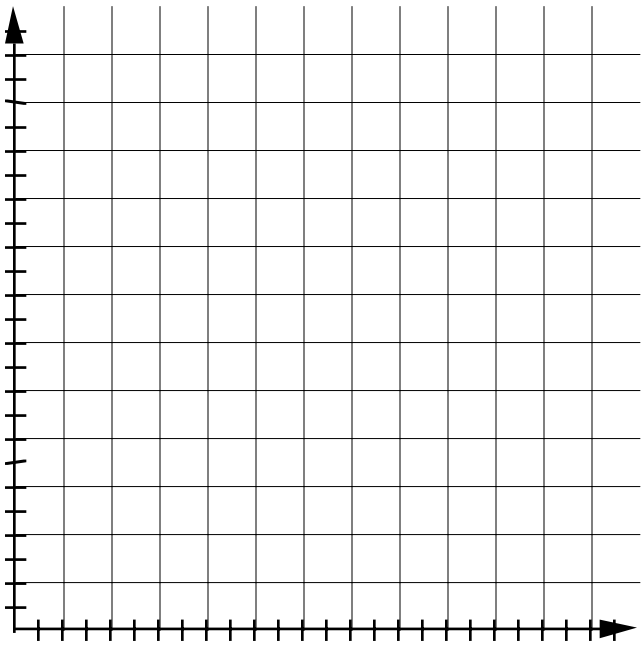
Name_____ **Date**_____

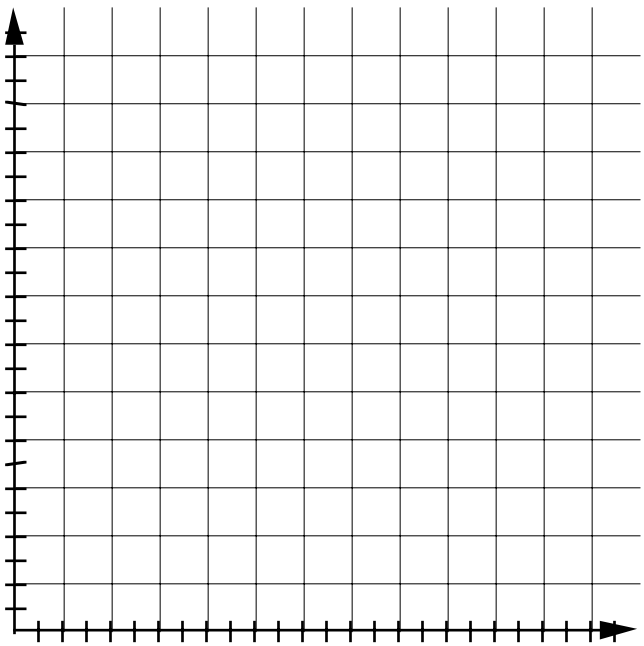


Name_____ **Date**_____









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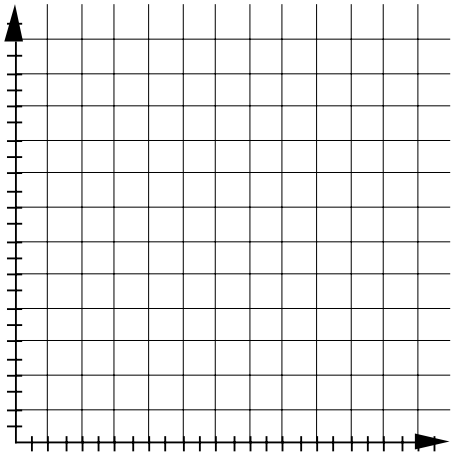

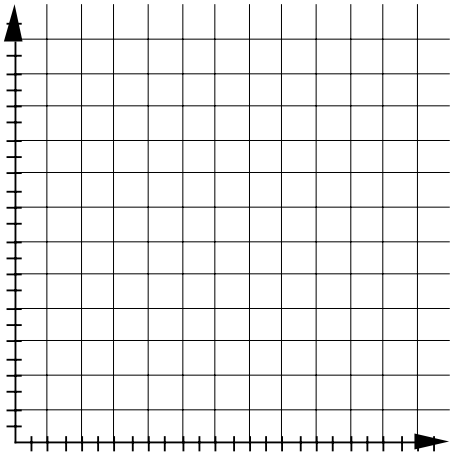

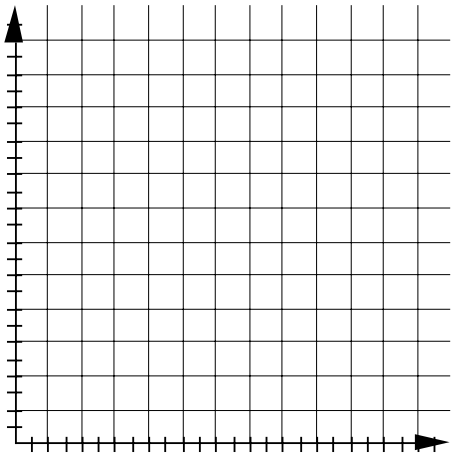

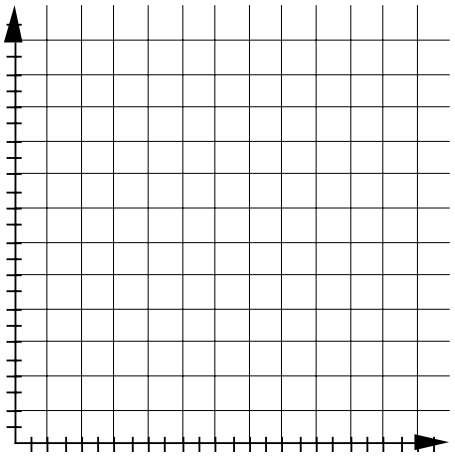

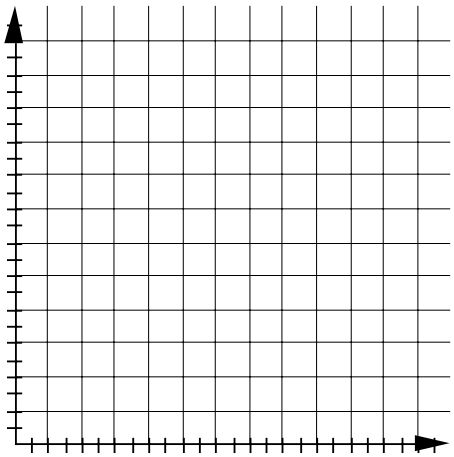

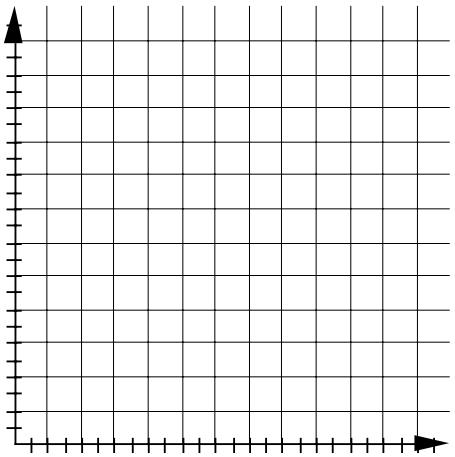

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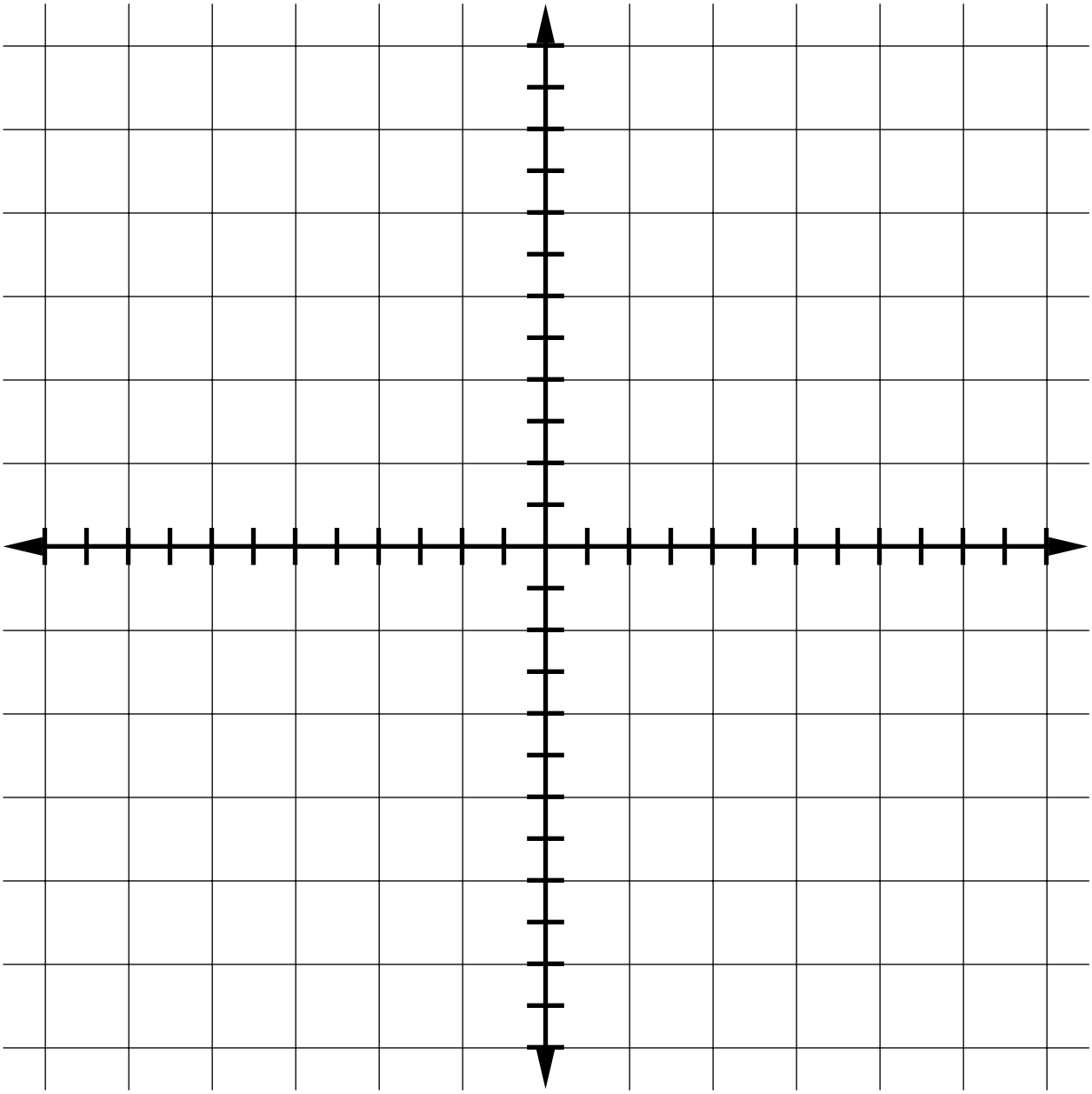

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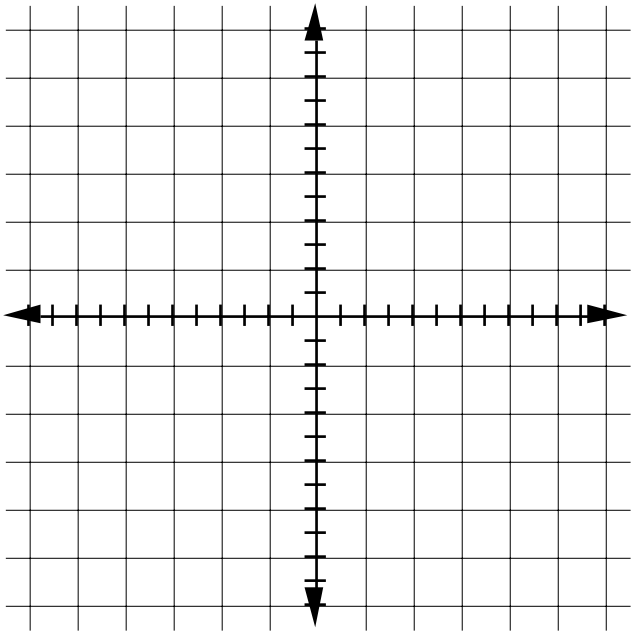

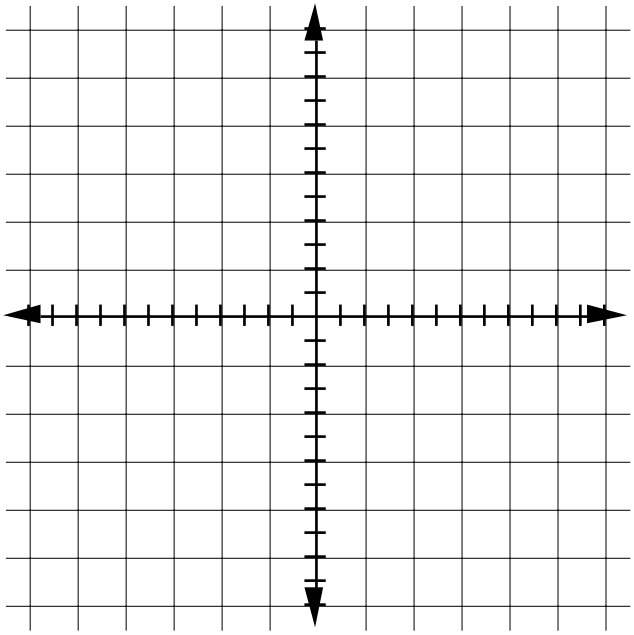

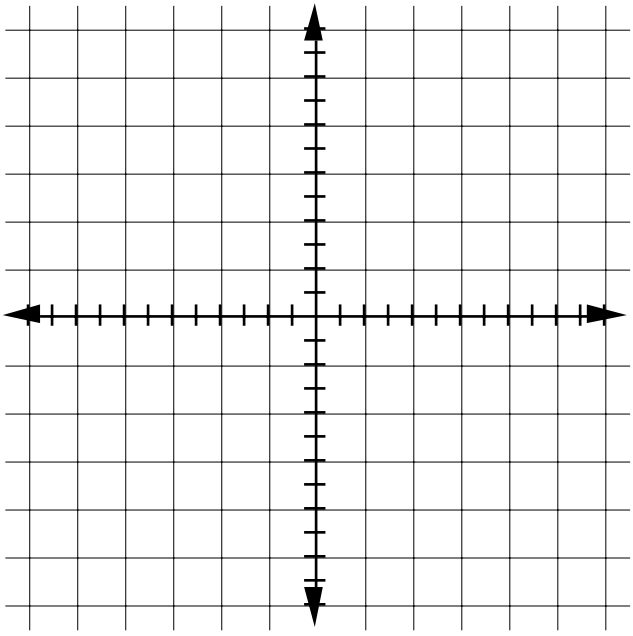

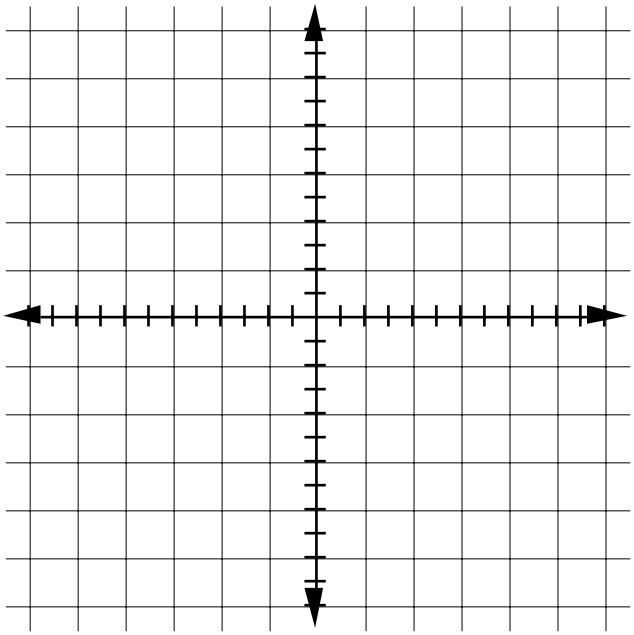

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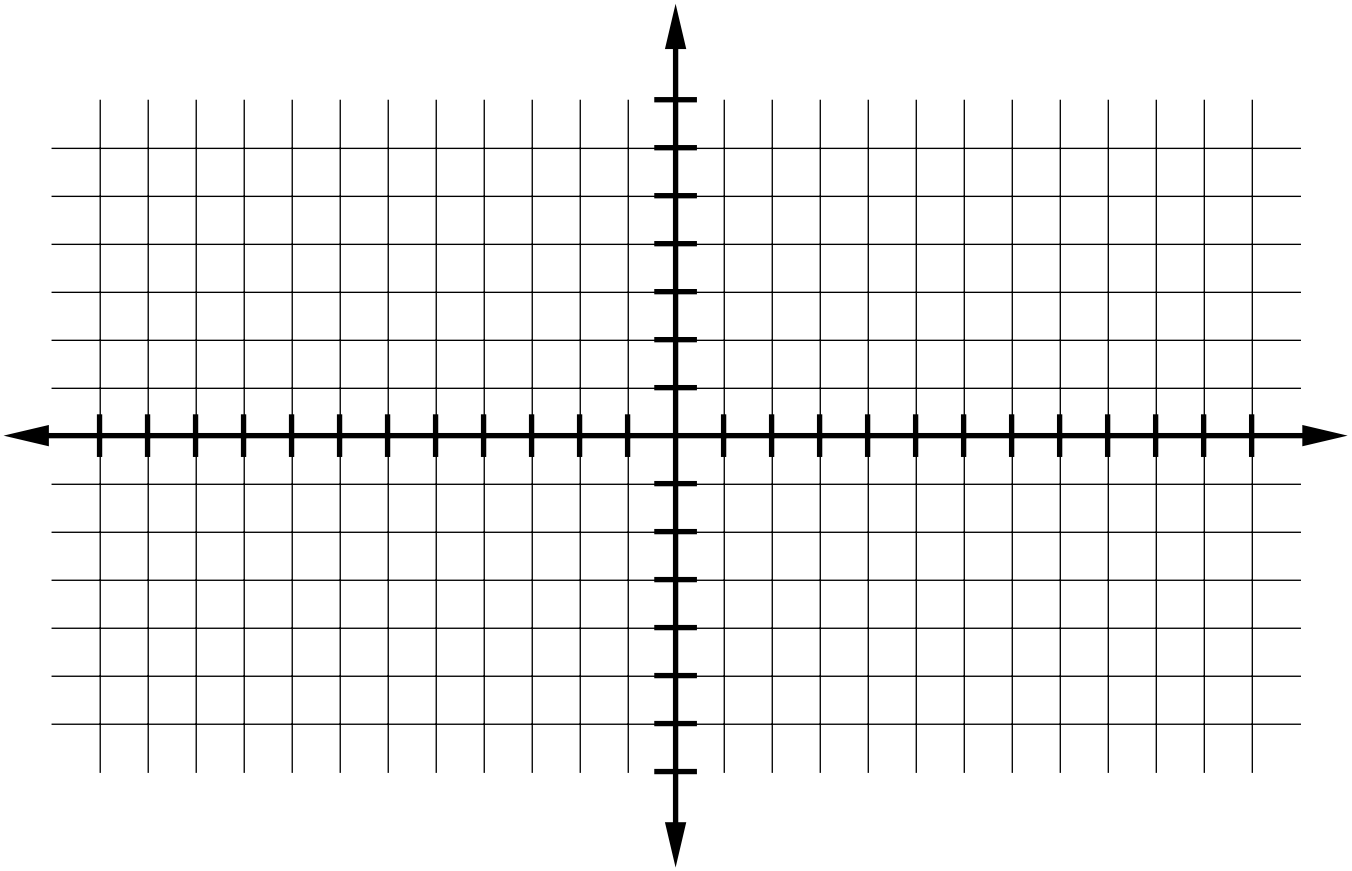
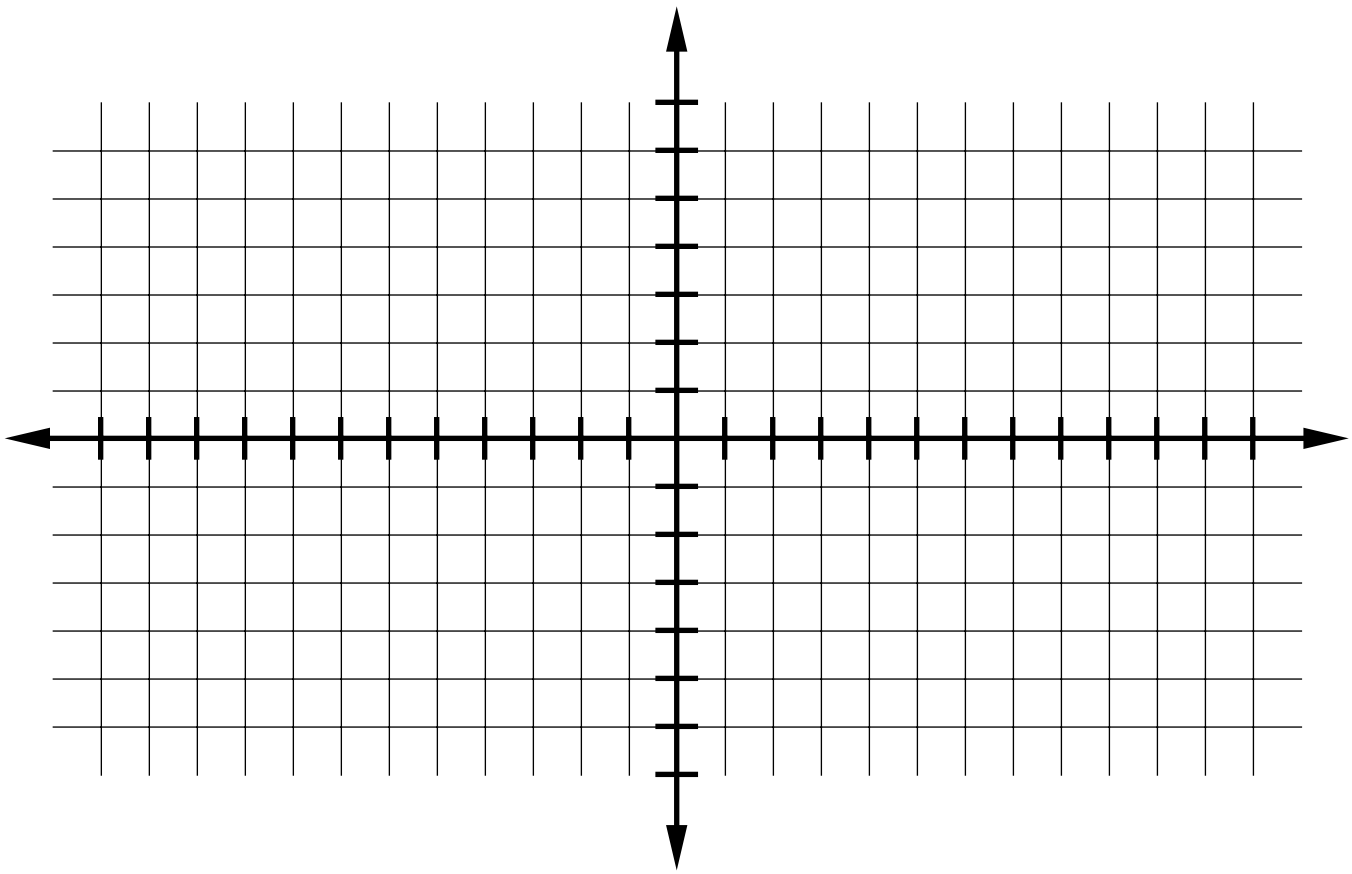
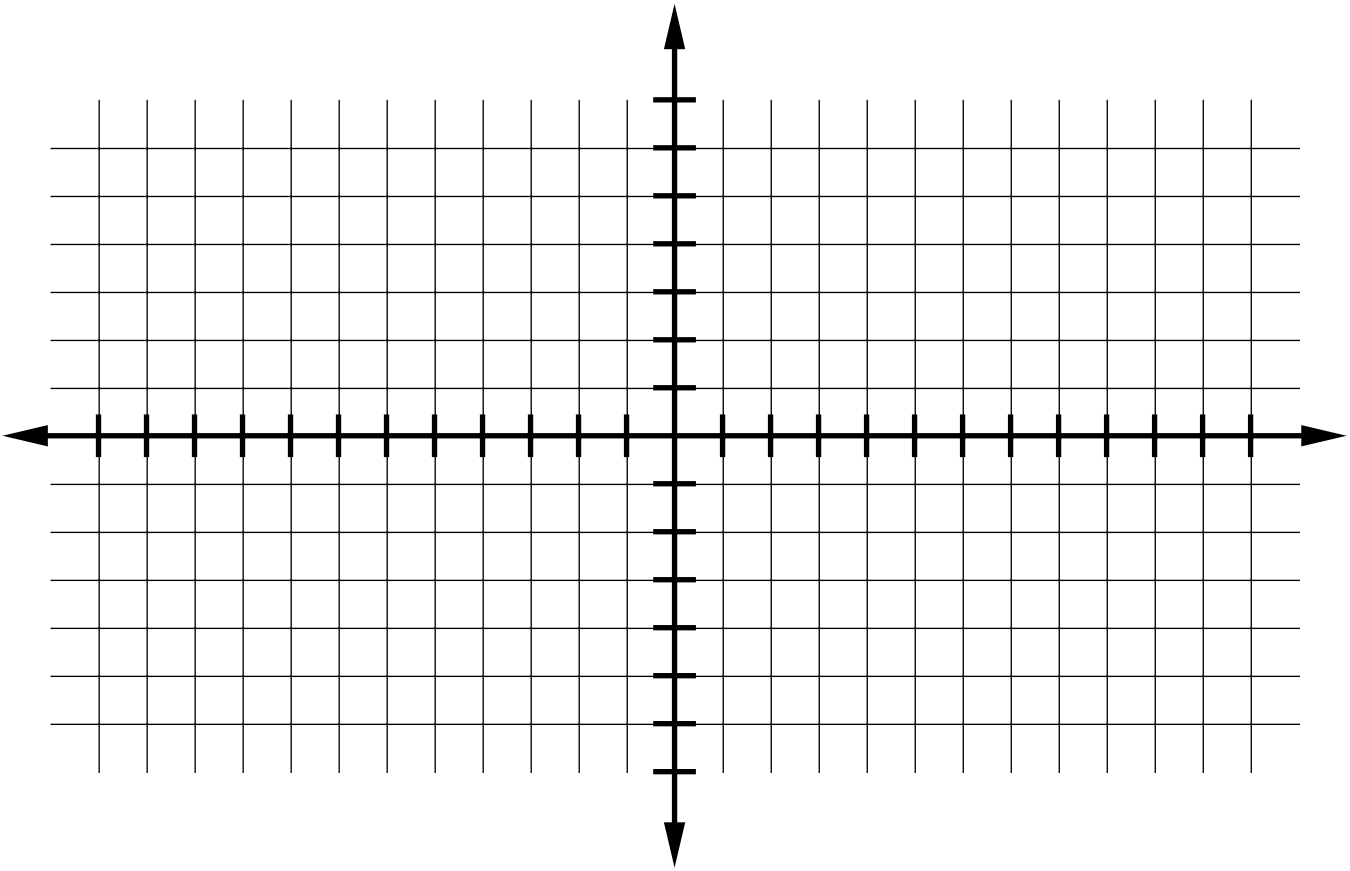
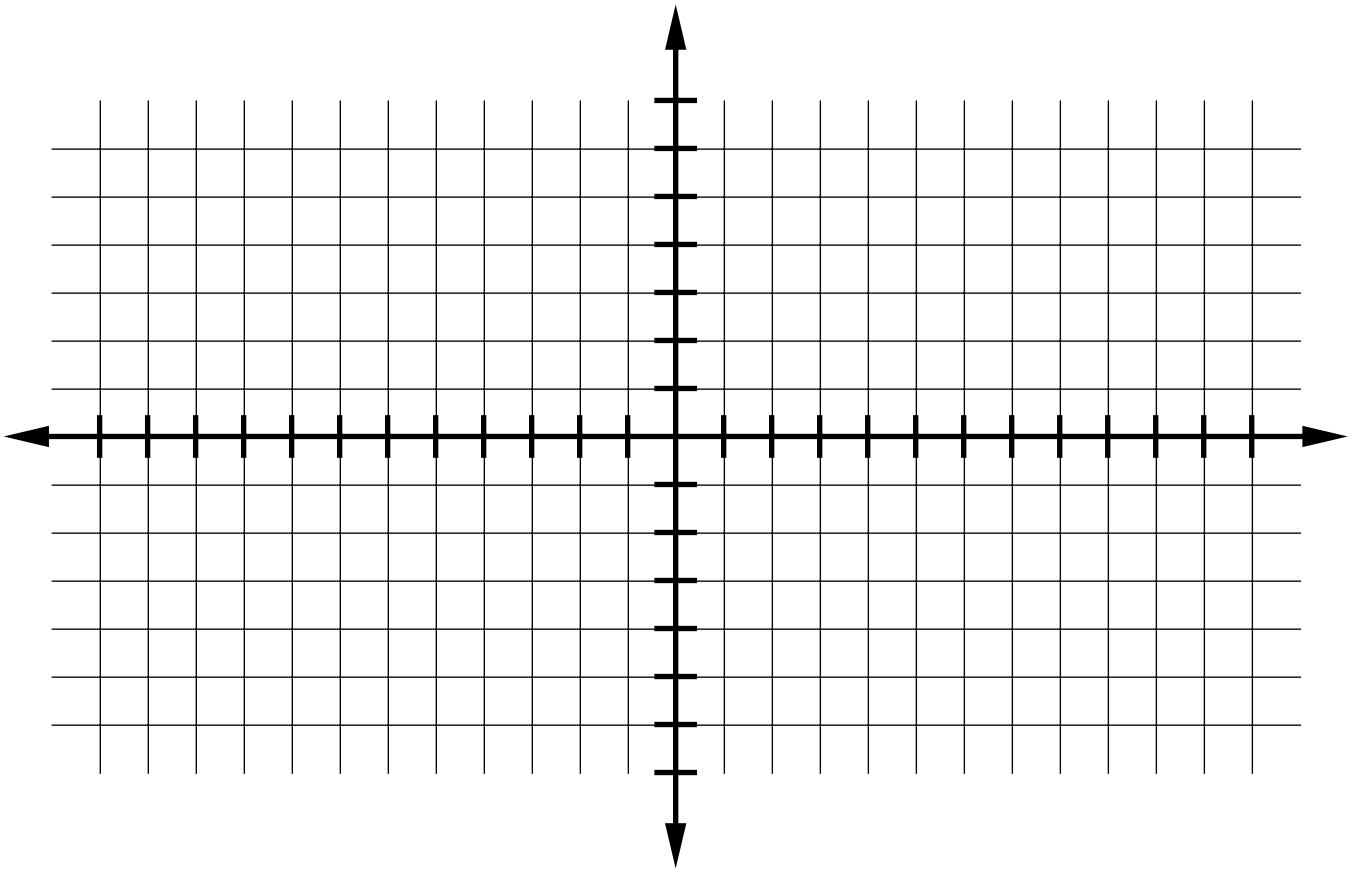
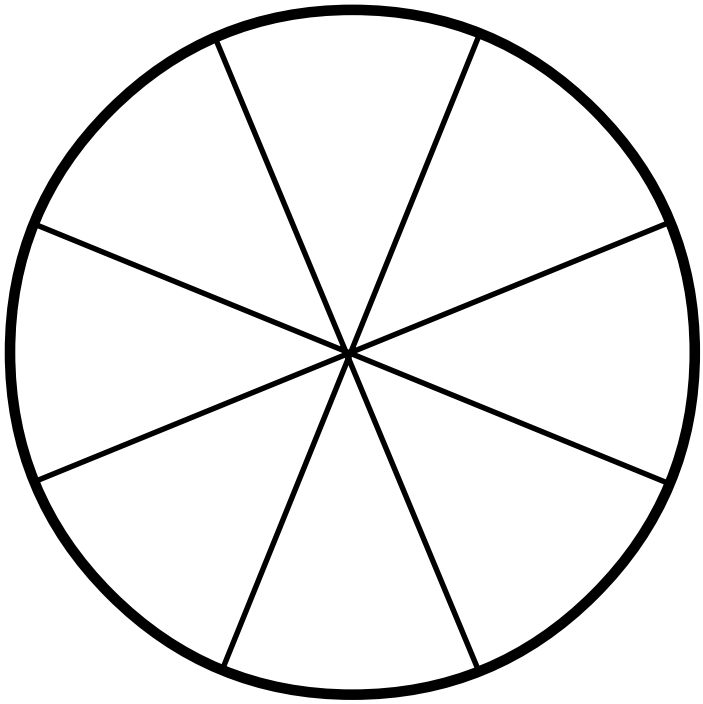
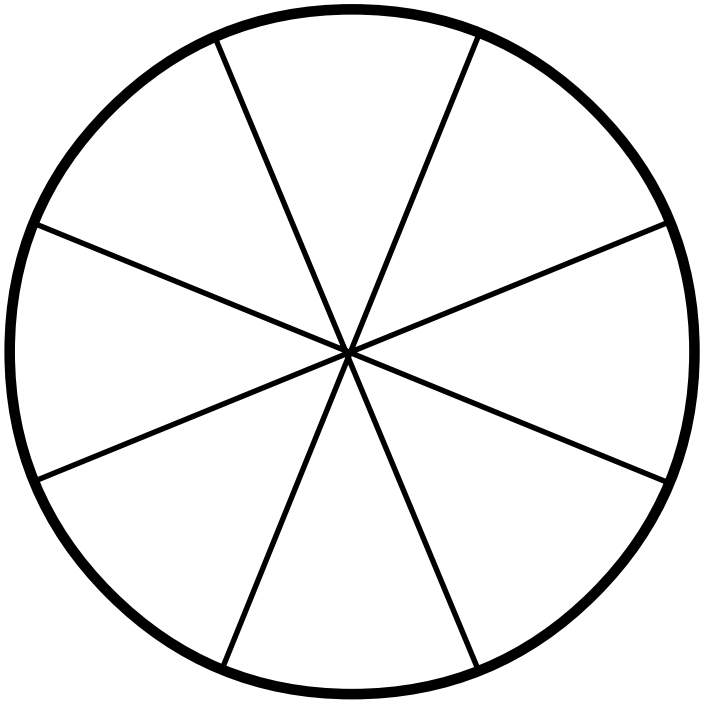


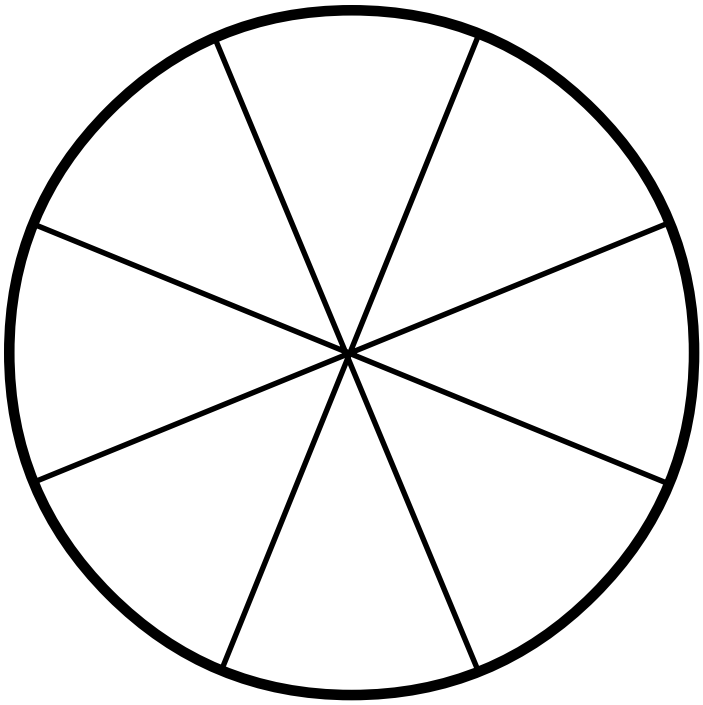


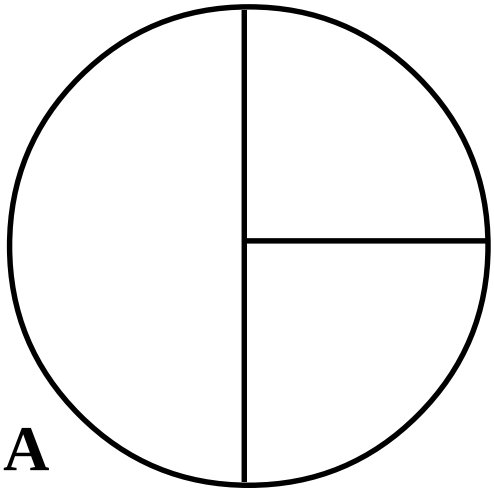


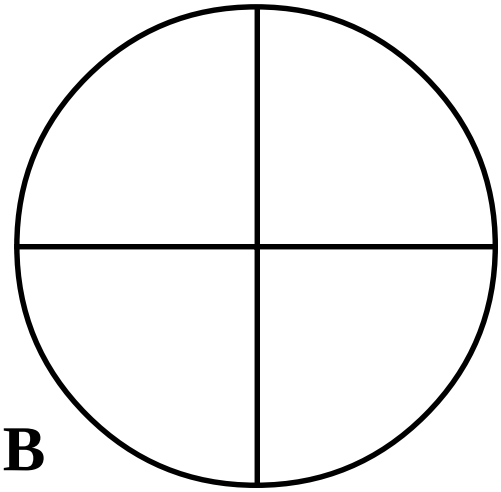


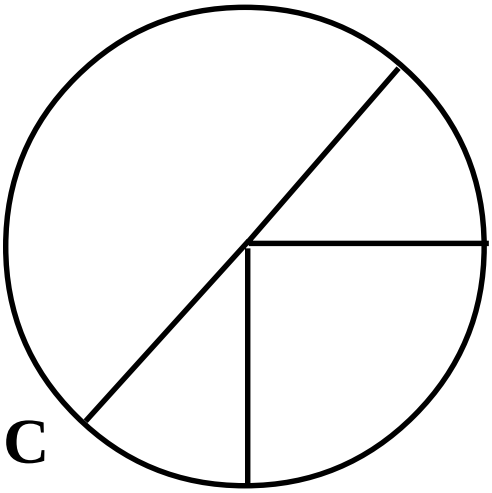


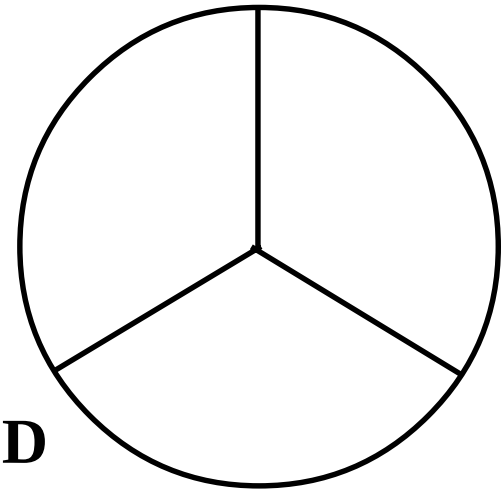


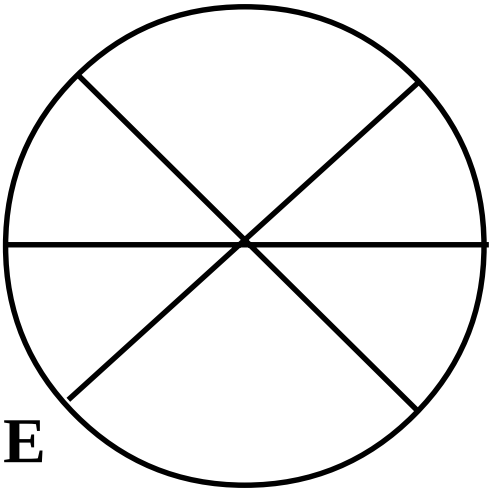


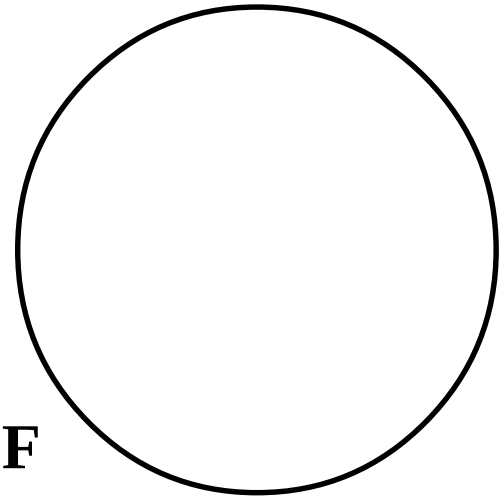




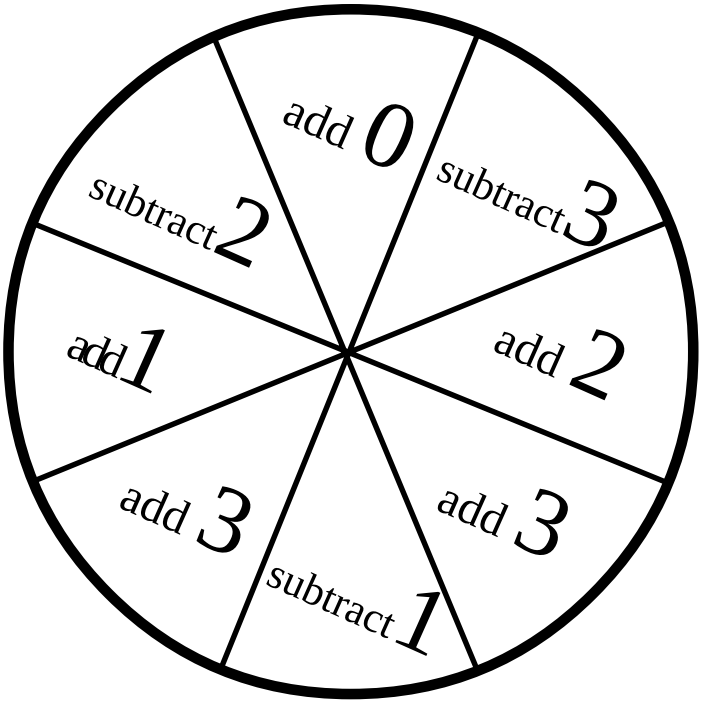


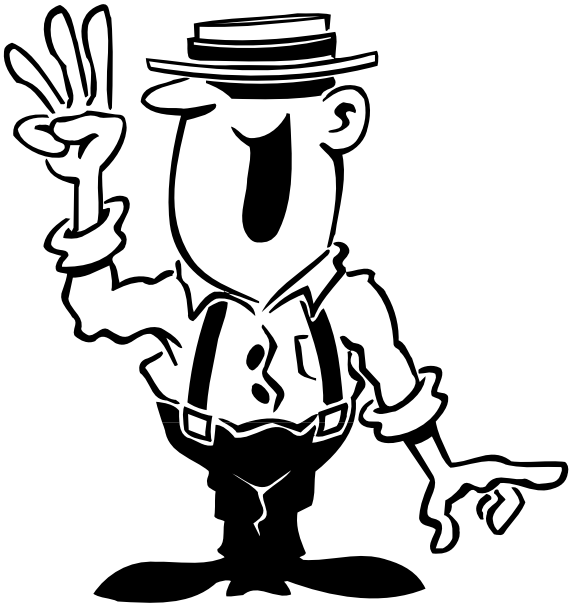






Tricky Three





player # 1										
player # 2										

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player # 2										

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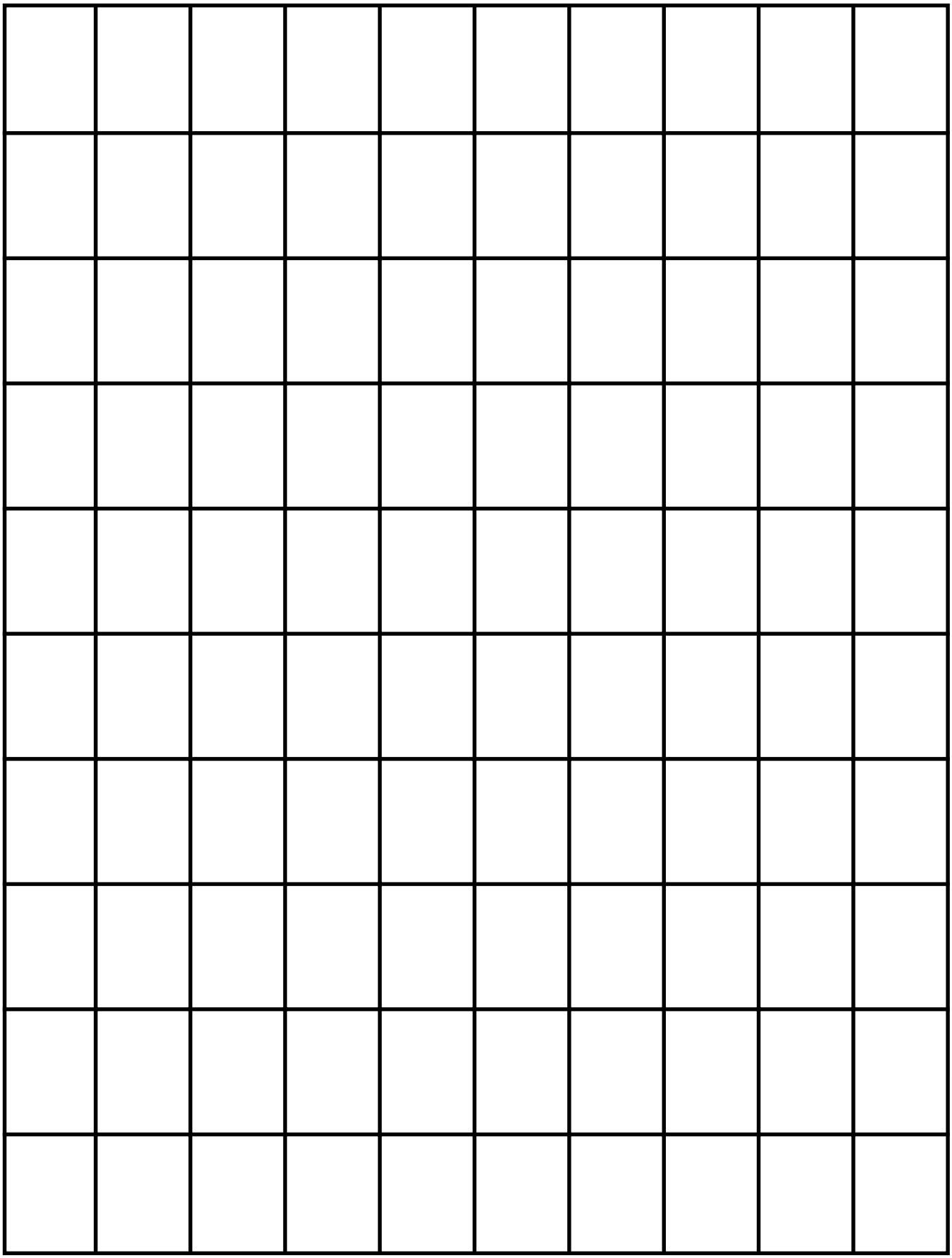
player # 2										

Name _____ Date / /

ONE HUNDRED GRID

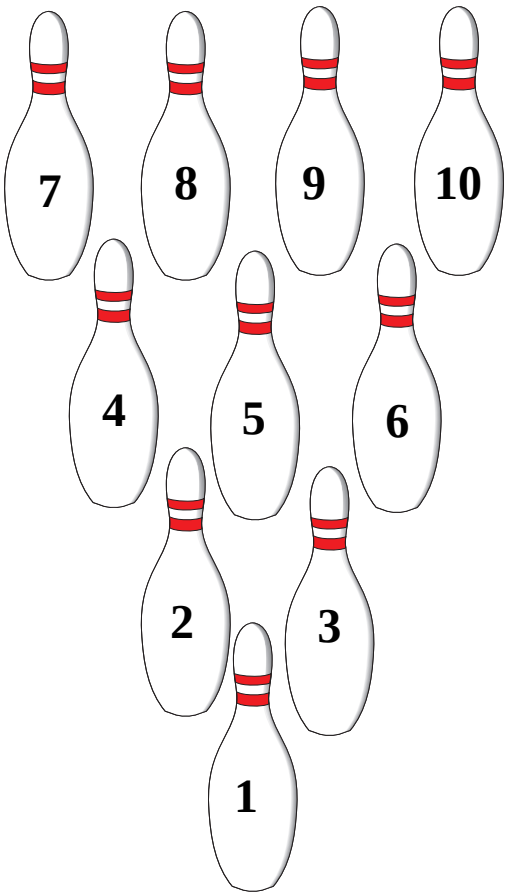


Name_____ Date / /_____

10	20	30	40	50	60	70	80	90	100
9	19	29	39	49	59	69	79	89	99
8	18	28	38	48	58	68	78	88	98
7	17	27	37	47	57	67	77	87	97
6	16	26	36	46	56	66	76	86	96
5	15	25	35	45	55	65	75	85	95
4	14	24	34	44	54	64	74	84	94
3	13	23	33	43	53	63	73	83	93
2	12	22	32	42	52	62	72	82	92
1	11	21	31	41	51	61	71	81	91

Name_____ Date / /_____

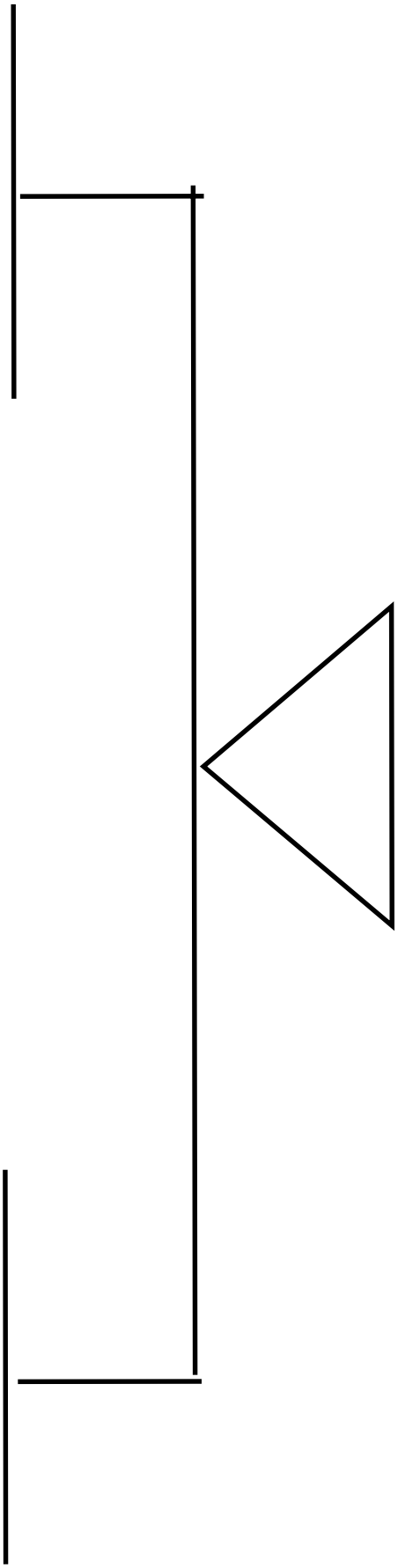
Bowl ‘em Over!



My Score:

Round 1	Round 2	Round 3	Round 4	Round 5	TOTAL

Name_____ Date / /_____



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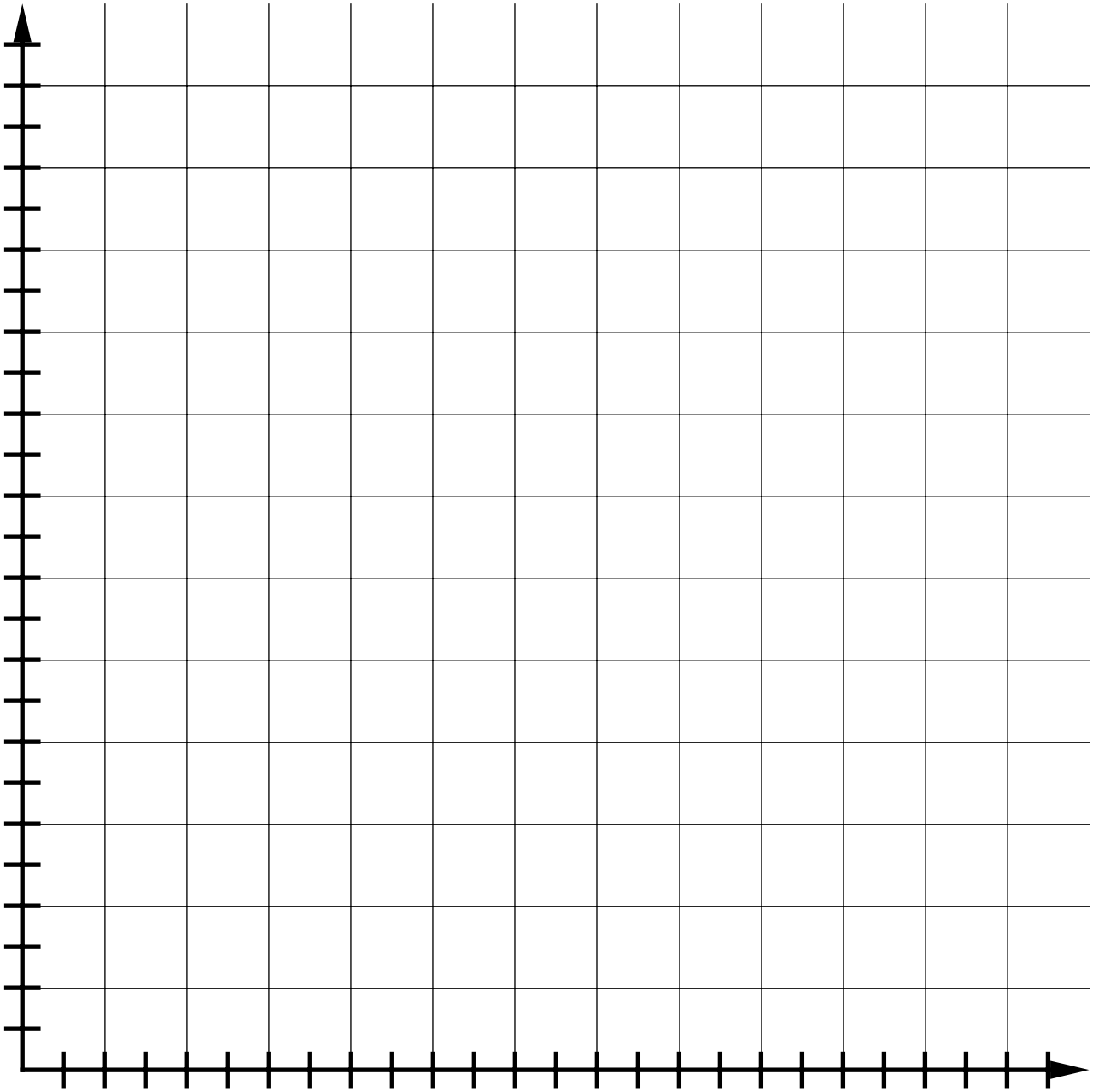

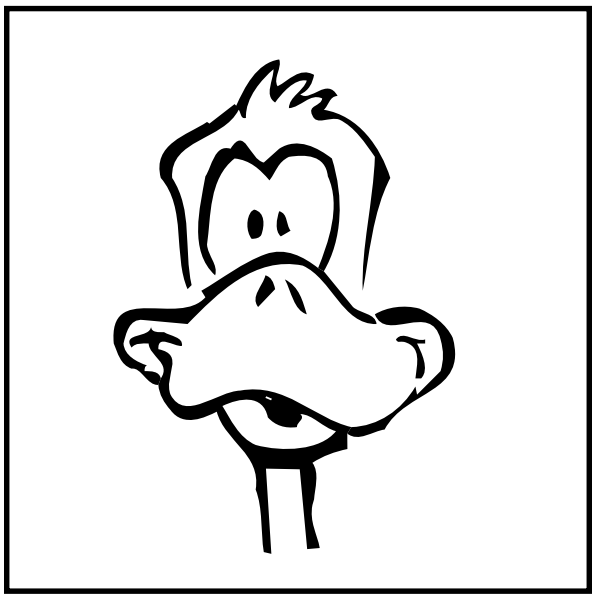

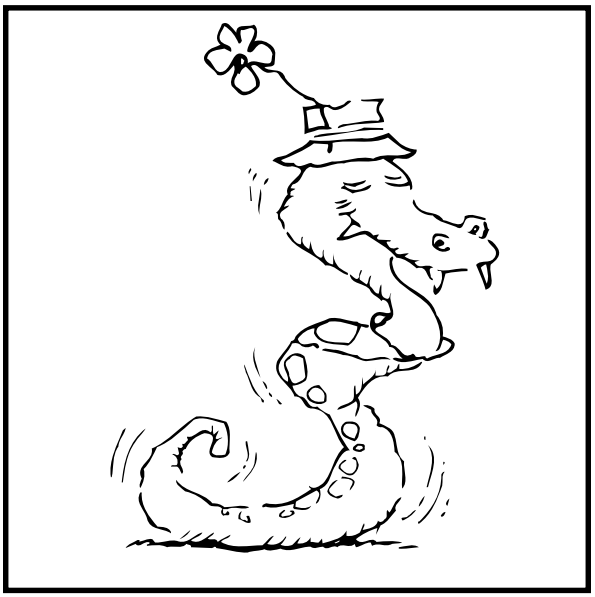

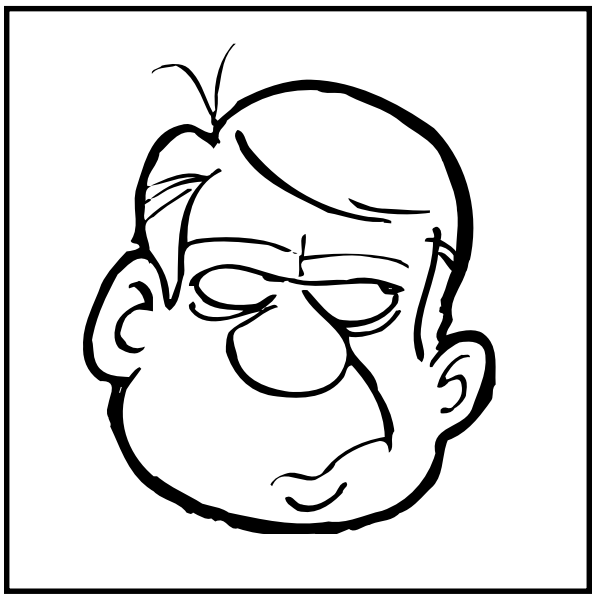

Name_____ Date / /_____

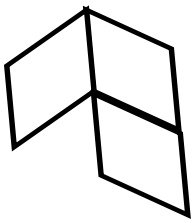

Figure #1

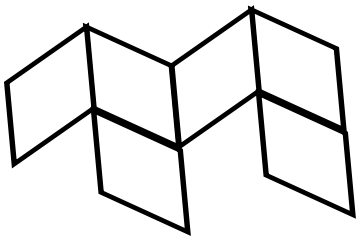

Figure #2

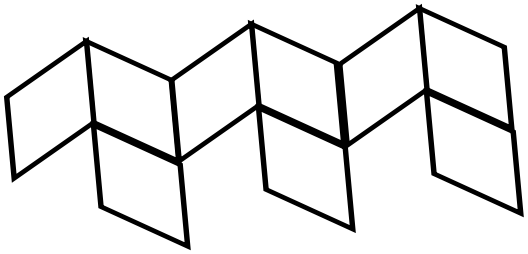

Figure #3

- How many rhombuses did you need to build each figure? Complete the chart.

Figure Number	Number of Rhombuses
1	
2	
3	
4	
5	

1) How many rhombuses would you need to make each figure?

a. Figure 8____ b. Figure 10 ____

c. Figure 20 ____ d. Figure 100____

2) Write a sentence to describe the pattern between the figure number and the number of rhombuses.

3) If a figure uses 36 rhombuses, what is its figure number?_____