Eureka Math

1st Grade
Module 5
Lesson 5

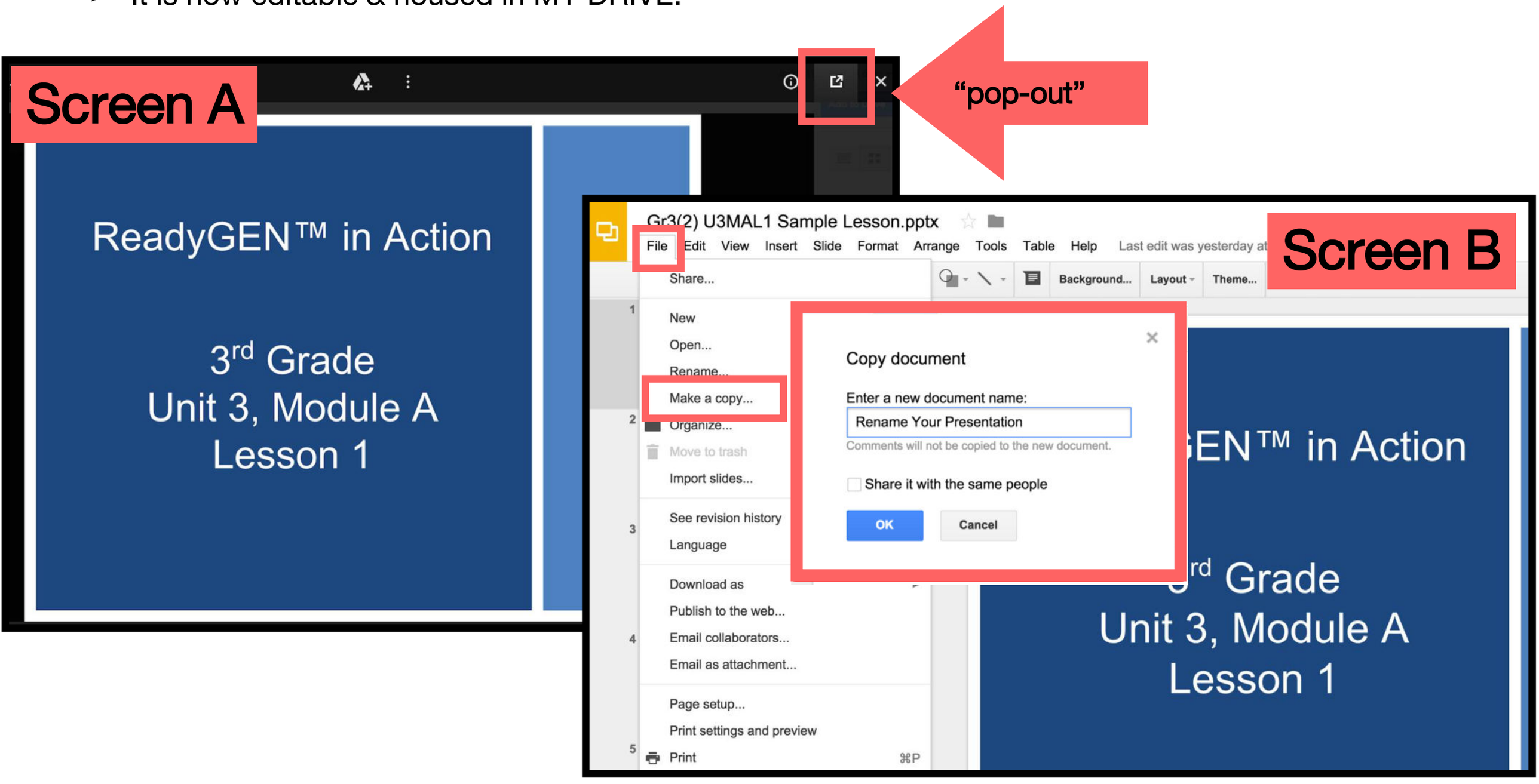
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.

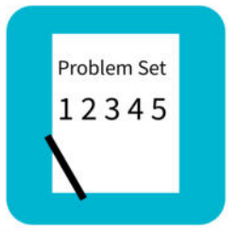


Icons

Read, Draw, Write

Learning Target

Personal White Board

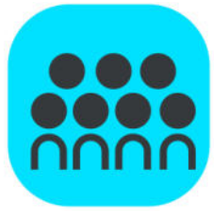


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

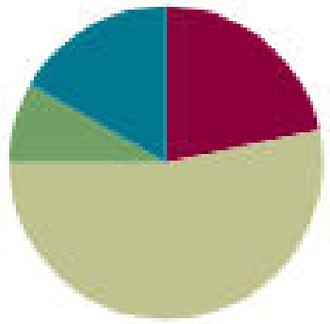
Small Group Time

Lesson 5

Objective: Compose a new shape from composite shapes.

Suggested Lesson Structure

Fluency Practice	(13 minutes)
Application Problem	(5 minutes)
Concept Development	(32 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



A NOTE ON STANDARDS ALIGNMENT:

In this lesson, students use tangram pieces as a context for composing a new shape from composite shapes (**1.G.2**). The Progression Document on Geometry does not include parallelogram as a shape for Grade 1 students, although this shape is one of the basic shapes within a tangram.

Materials Needed

Teacher:

- (T) Tangram (Template), scissors, scissors
  - *These tangram pieces will be used again in Lesson 7

Student:

- (S) Tangram (Template) (cut off the bottom tangram on each sheet to be sent home with homework)
  - The tangram pieces used in class will be used again in Lesson 7
- Scissors

Notes:

Some students may need support cutting their tangram sheets. Precut some of the sheets, or, as the rest of the class is cutting, assist certain students.

I can create composite shapes from two-dimensional shapes.

Core Fluency Sprint

A

Number Correct:

Name _____ Date _____

*Write the unknown number. Pay attention to the symbols.

1.	4 + 1 = ____	16.	4 + 3 = ____
2.	4 + 2 = ____	17.	____ + 4 = 7
3.	4 + 3 = ____	18.	7 = ____ + 4
4.	6 + 1 = ____	19.	5 + 4 = ____
5.	6 + 2 = ____	20.	____ + 5 = 9
6.	6 + 3 = ____	21.	9 = ____ + 4
7.	1 + 5 = ____	22.	2 + 7 = ____
8.	2 + 5 = ____	23.	____ + 2 = 9
9.	3 + 5 = ____	24.	9 = ____ + 7
10.	5 + ____ = 8	25.	3 + 6 = ____
11.	8 = 3 + ____	26.	____ + 3 = 9
12.	7 + 2 = ____	27.	9 = ____ + 6
13.	7 + 3 = ____	28.	4 + 4 = ____ + 2
14.	7 + ____ = 10	29.	5 + 4 = ____ + 3
15.	____ + 7 = 10	30.	____ + 7 = 3 + 6

Shape Flash

I’m going to to show you a shape card or a 3D shape for 3 seconds.

You will answer one of the questions I ask when I give you a signal!

Application Problem

RDW

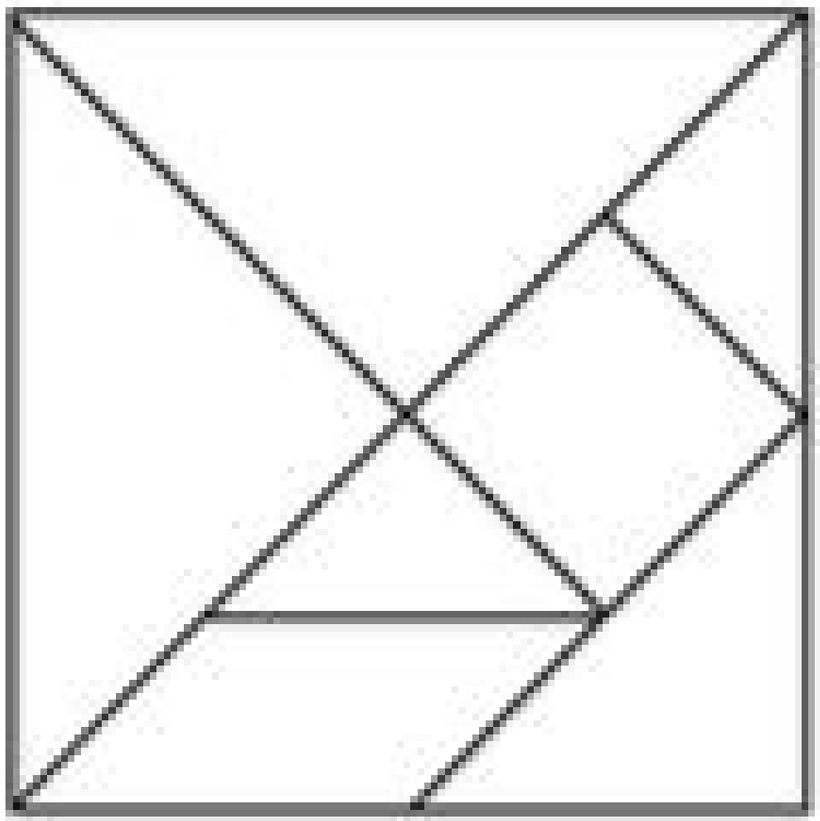
Darnell and Tamra are comparing their grapes. Darnell's vine has 9 grapes. Tamra's vine has 6 grapes. How many more grapes does Darnell have than Tamra?

Concept Development

Today, we will be cutting out our shapes from this one large shape. What is this shape?

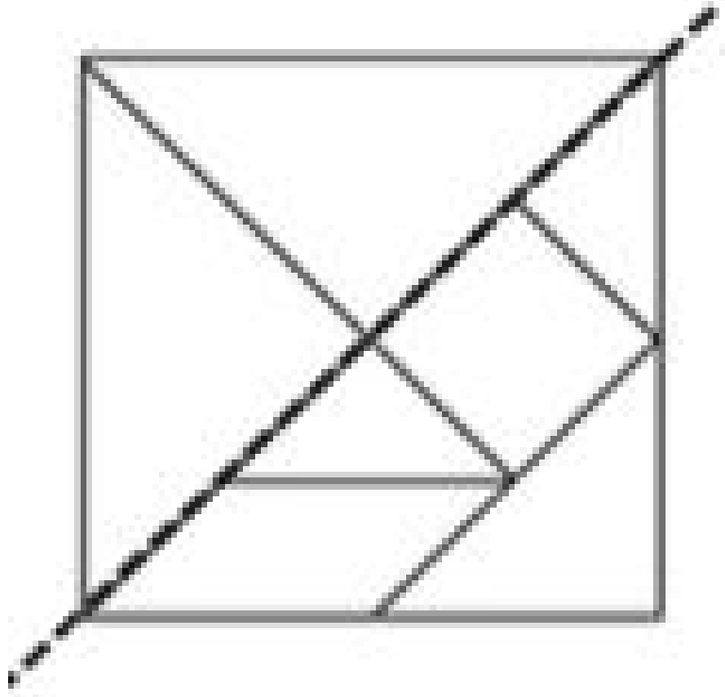
Concept Development

Cut out the large square from your piece of paper.



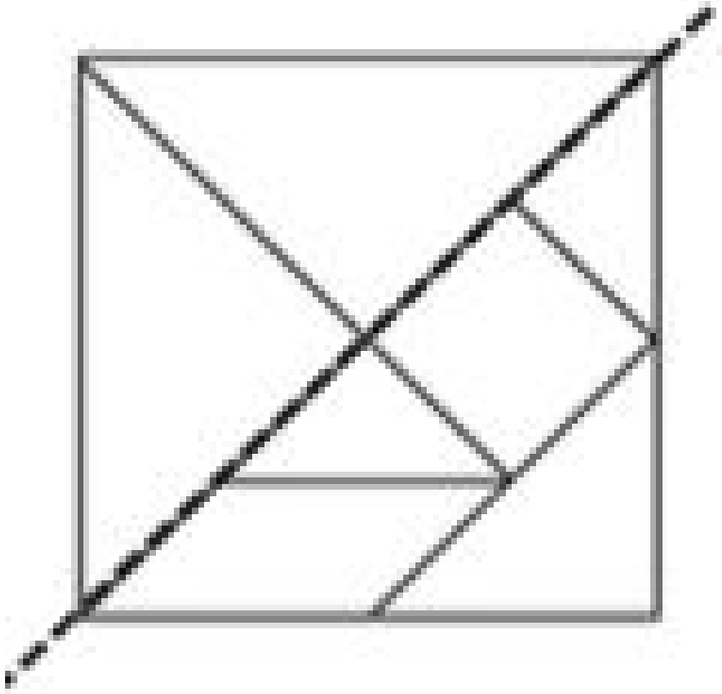
Concept Development

Look how I folded my paper down the diagonal line that goes through the middle of the square.



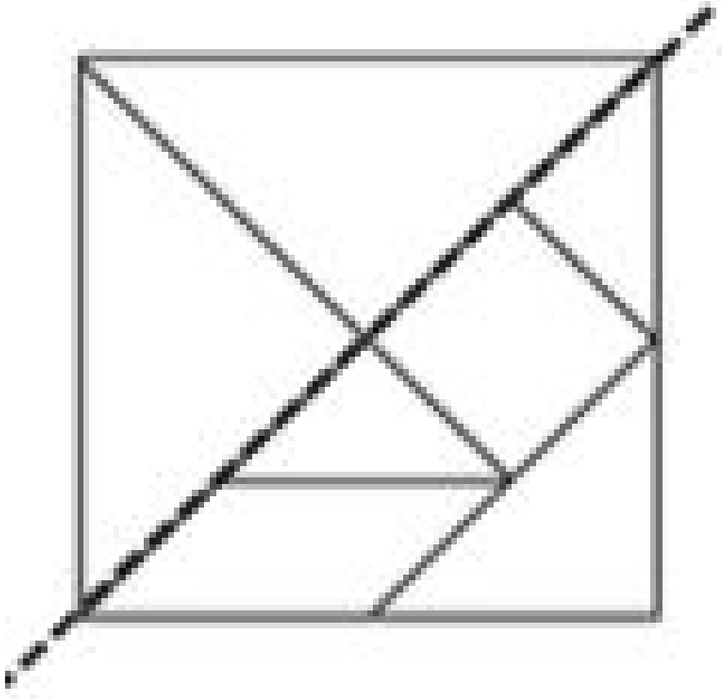
Concept Development

What do you see on one side?



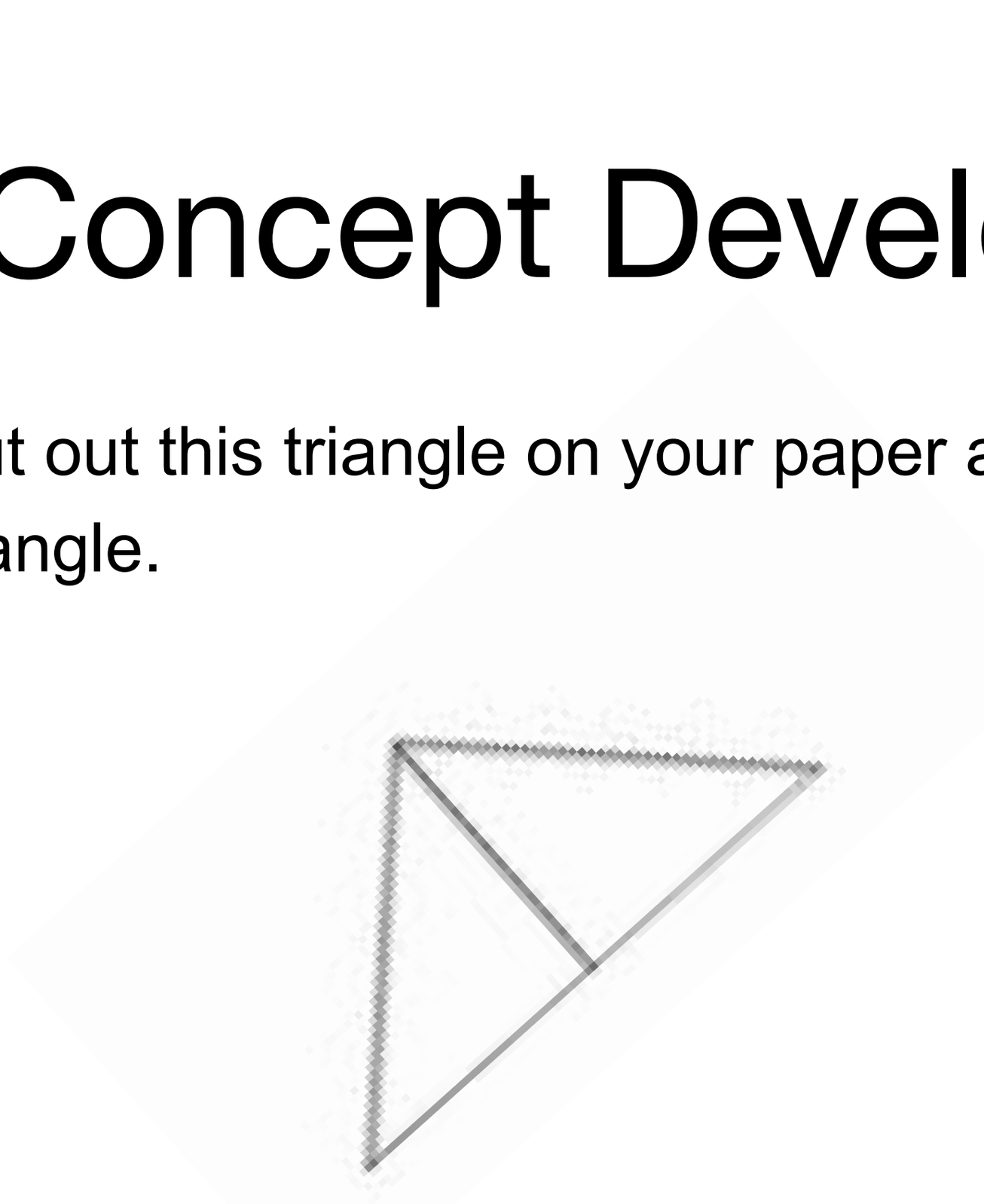
Concept Development

A triangle!



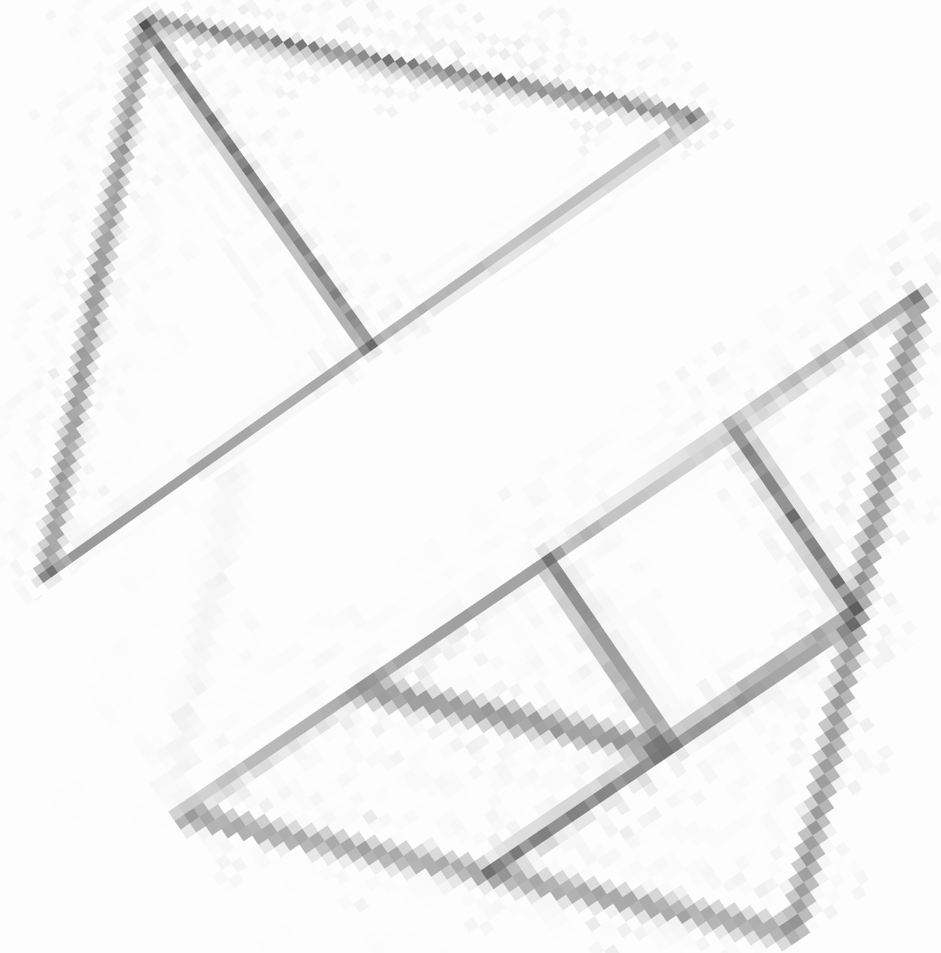
Concept Development

Cut out this triangle on your paper as I cut out my triangle.



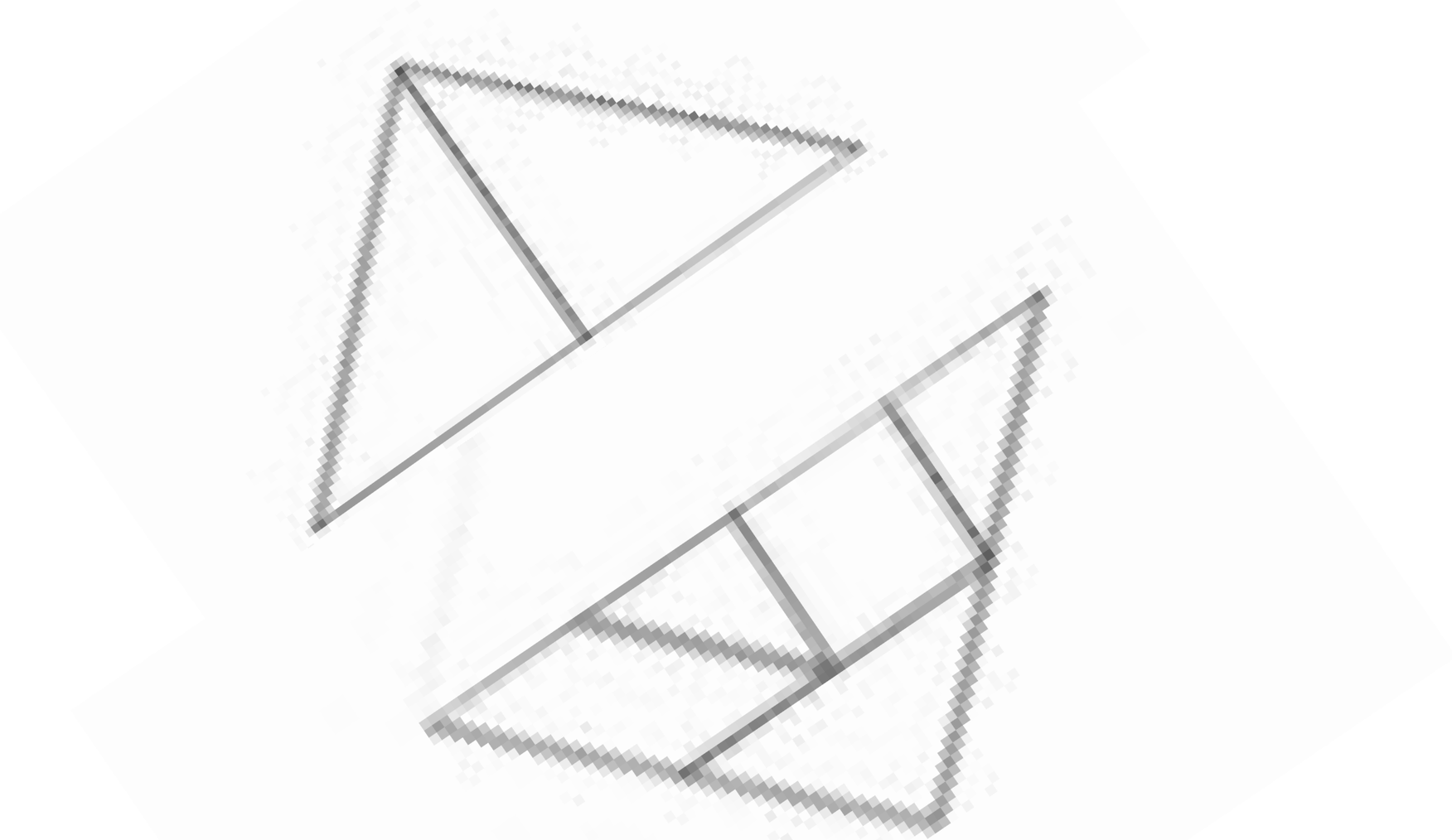
Concept Development

How many pieces do you have now?



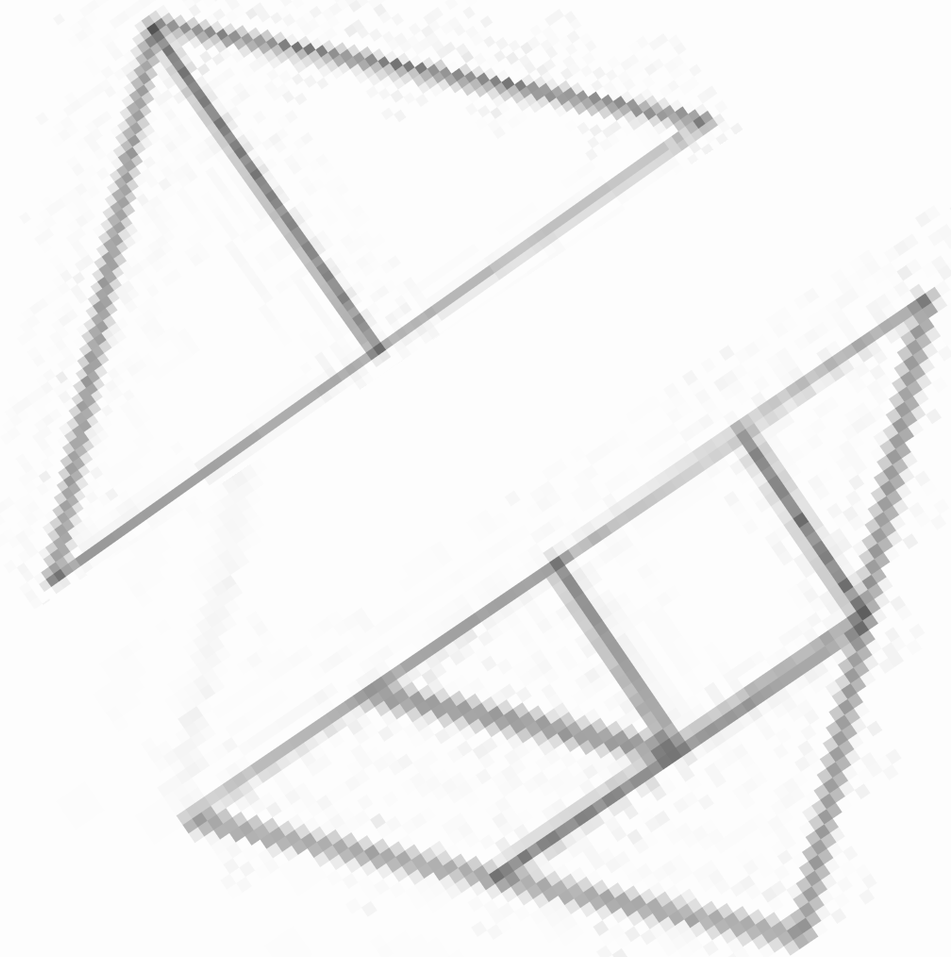
Concept Development

Two pieces!



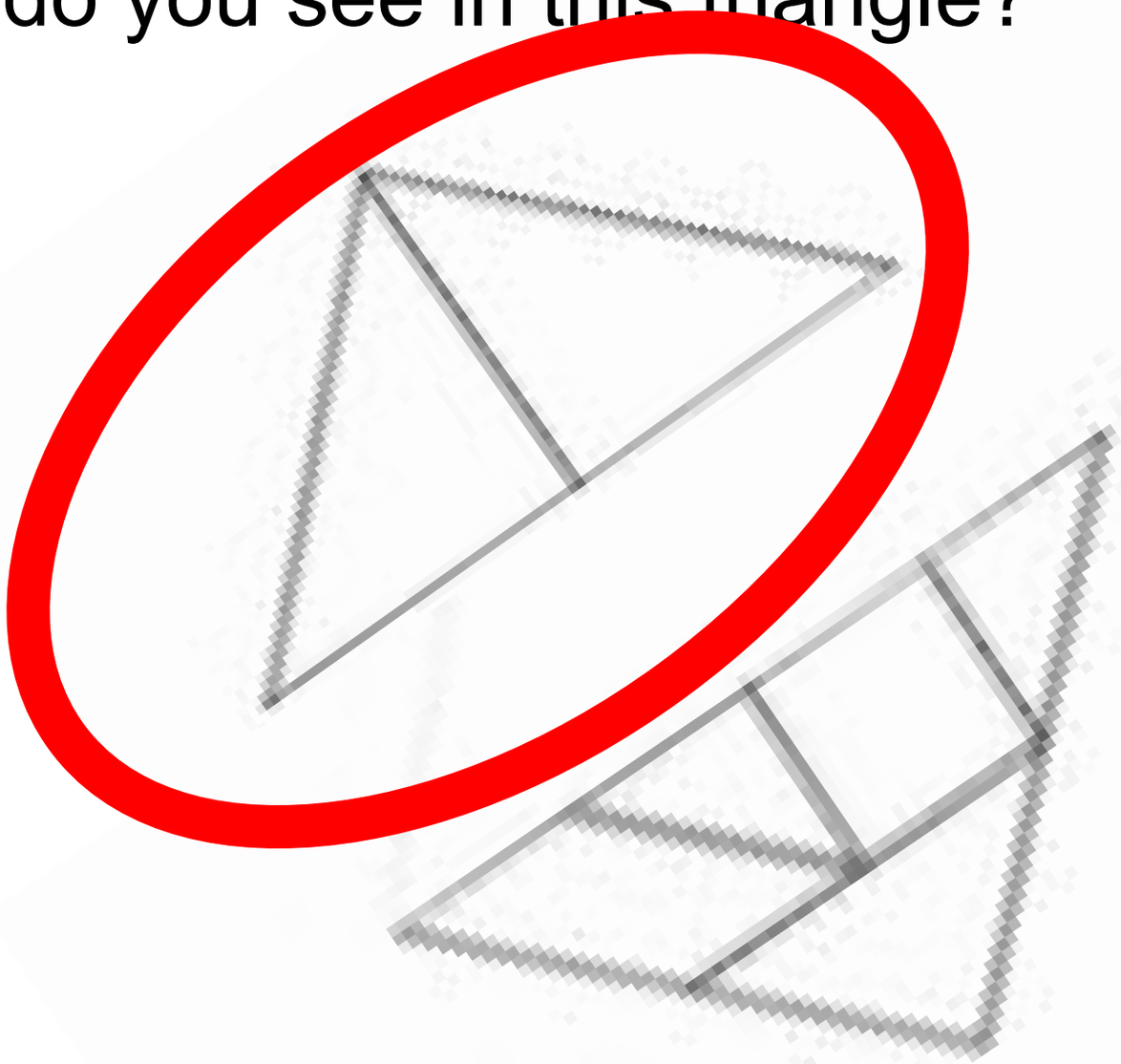
Concept Development

What is the shape of each piece?



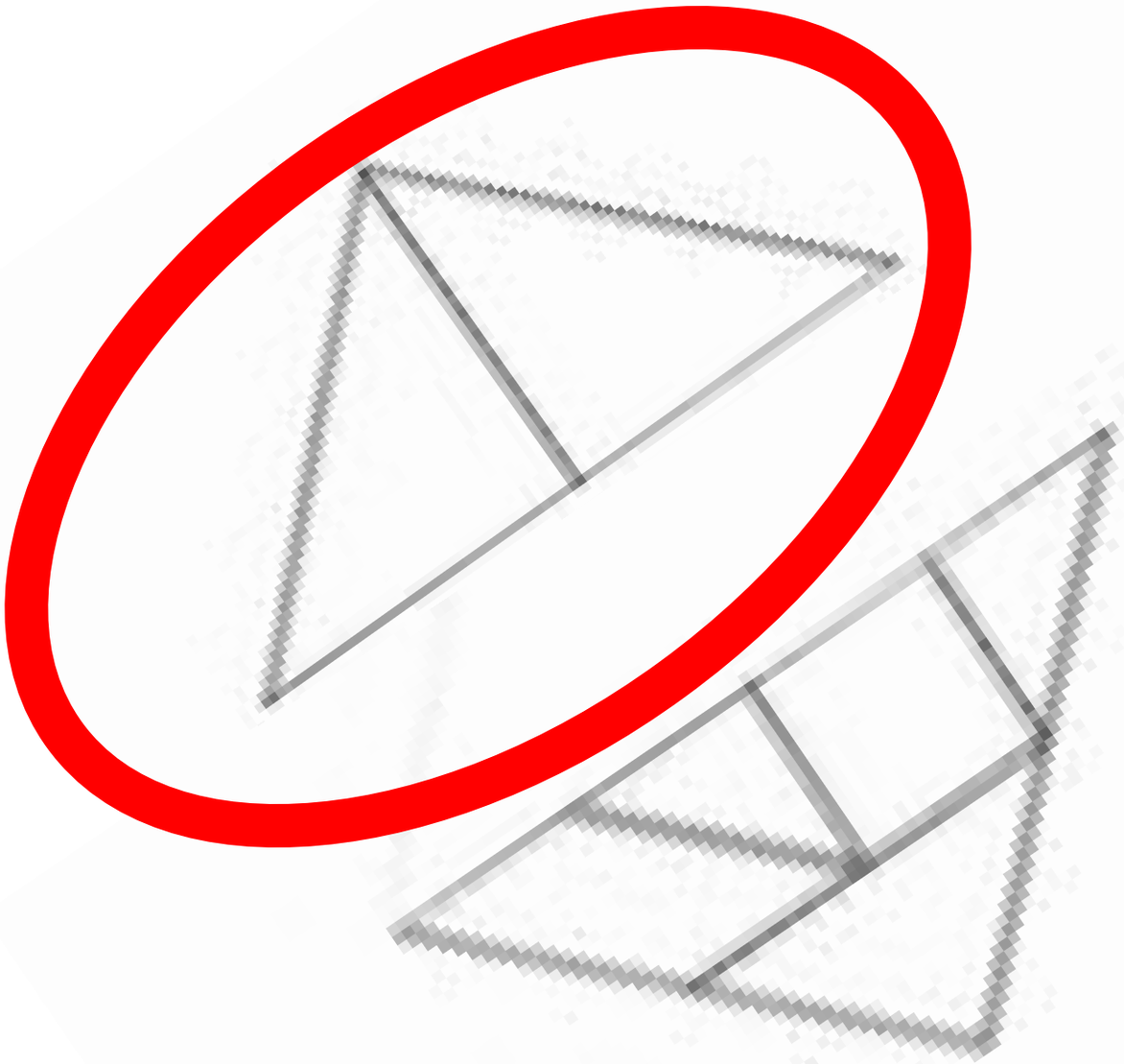
Concept Development

Both of these triangles are made of smaller parts. What parts do you see in this triangle?



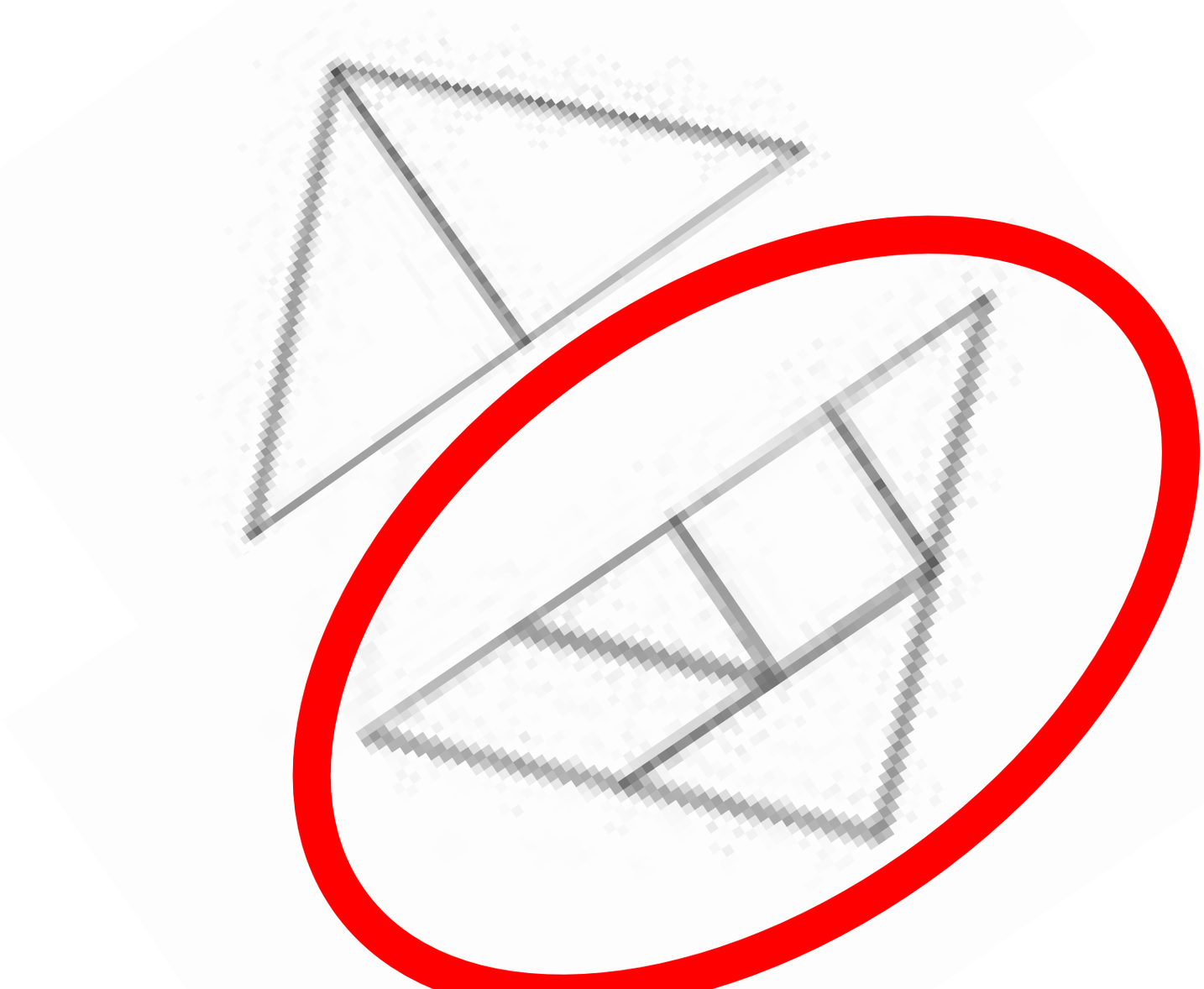
Concept Development

That triangle is made of two smaller triangles.



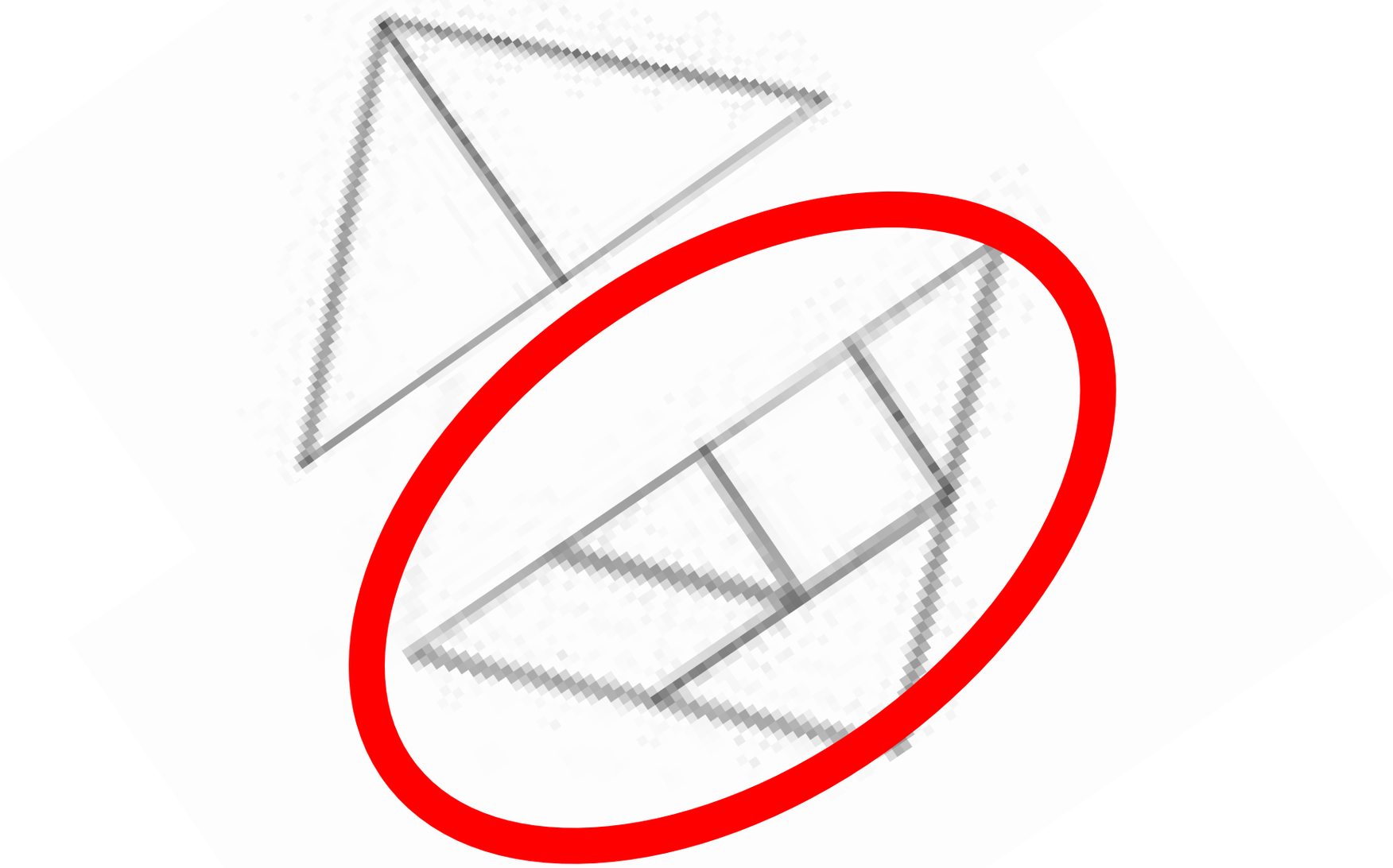
Concept Development

What parts do you see in this triangle?



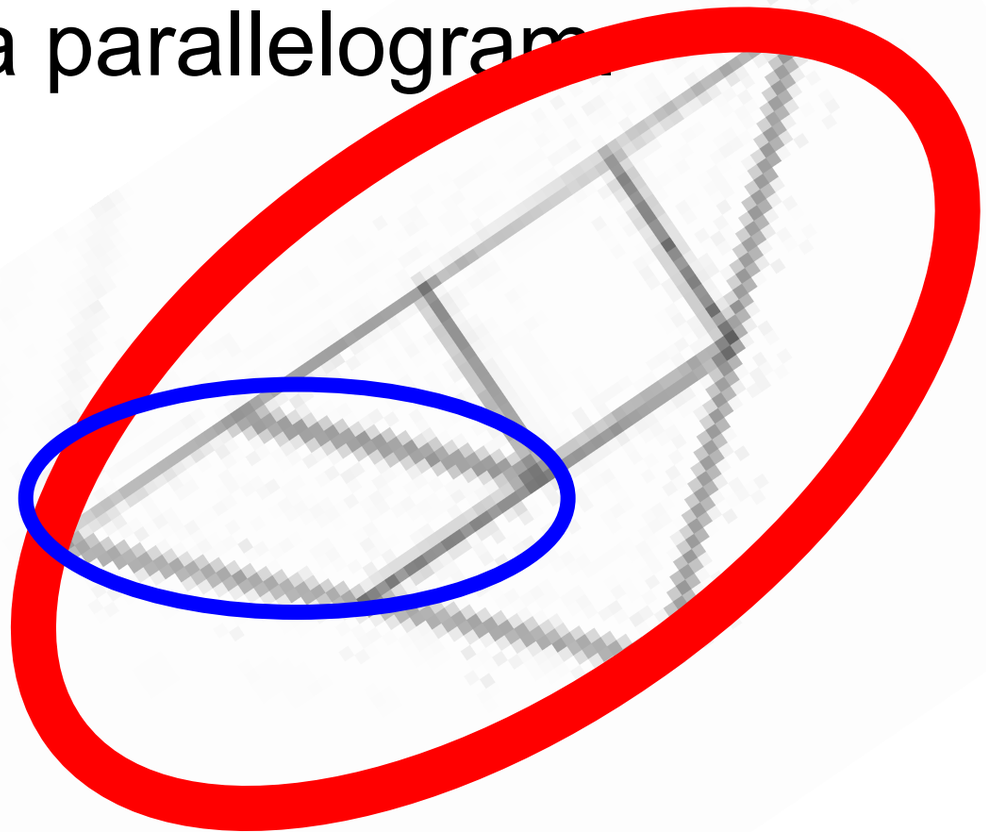
Concept Development

I see two small triangles and one bigger triangle. I see a square.I see another shape. It kind of looks like a rhombus, but the sides don’t look like they are the same length.



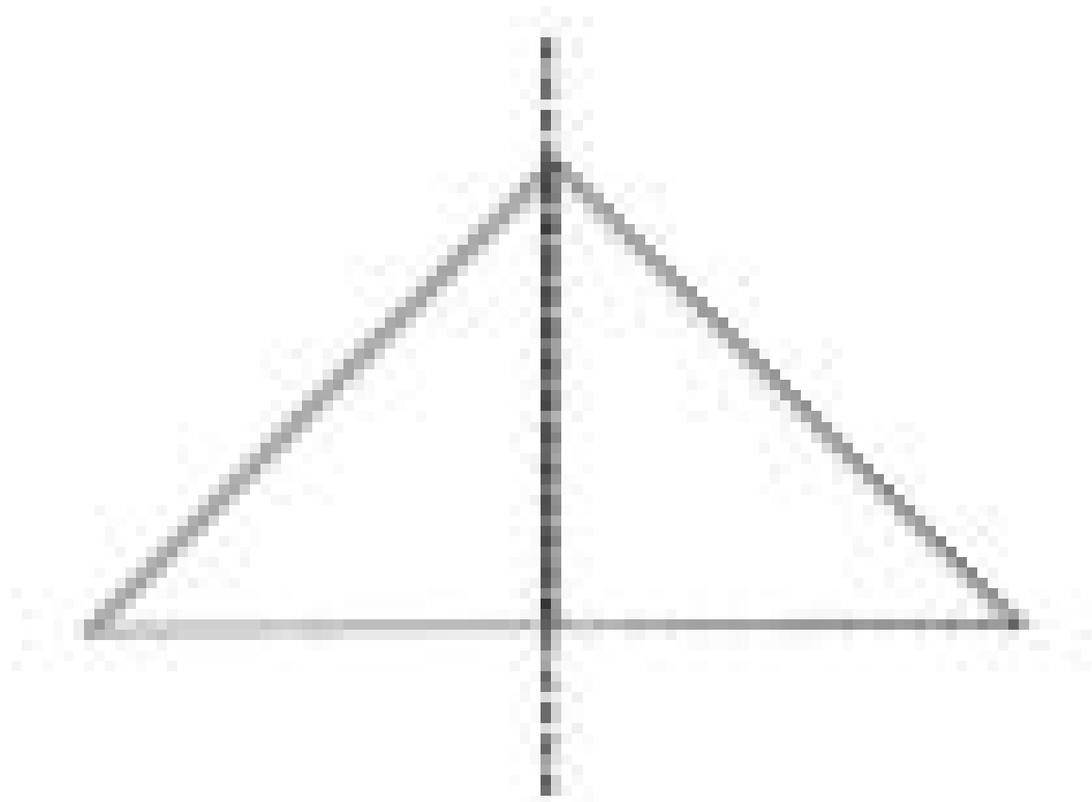
Concept Development

You are right. That shape is not quite a rhombus. A rhombus is a special parallelogram that has equal straight sides. When the shape is like this, where all pairs of opposite sides are equal, it is called a parallelogram. Do you see how this pair is not the same length as this pair? One pair is long, and the other is shorter, so it cannot be called a rhombus. We just call it a parallelogram.



Concept Development

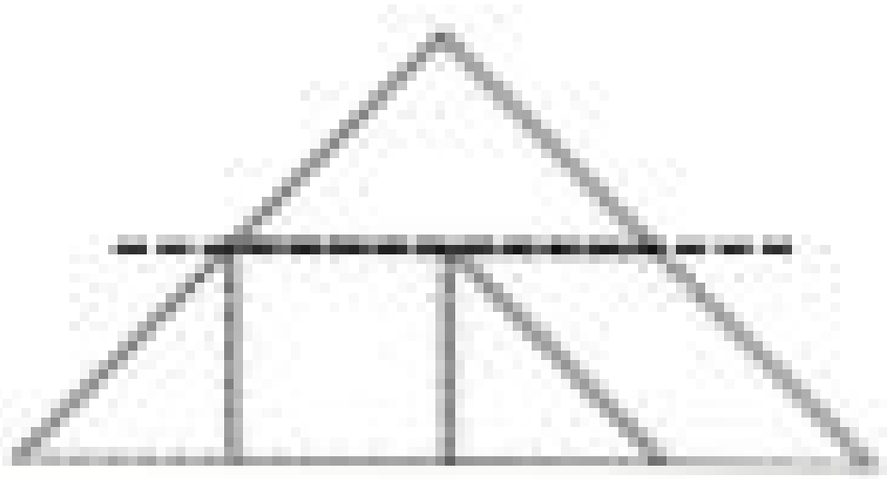
Let’s cut apart the two triangles that make this first large triangle.



Concept Development

Put your two triangles you cut apart to the side.

Take the largest triangle on your table, and place it in front of you like mine. Let’s cut off this little triangle at the top.



Concept Development

What shape do the square, little triangles, and parallelogram make together? Do you see what shape has been hiding inside the larger triangle?

Concept Development

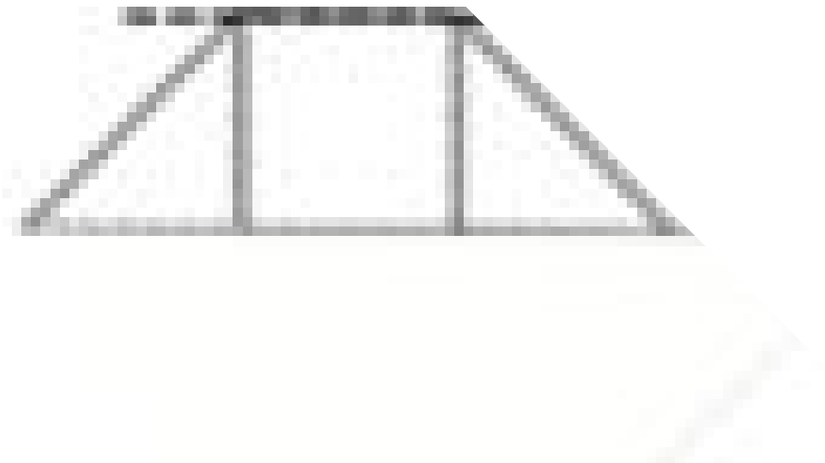
A trapezoid!

Concept Development

Let’s cut out the parallelogram.

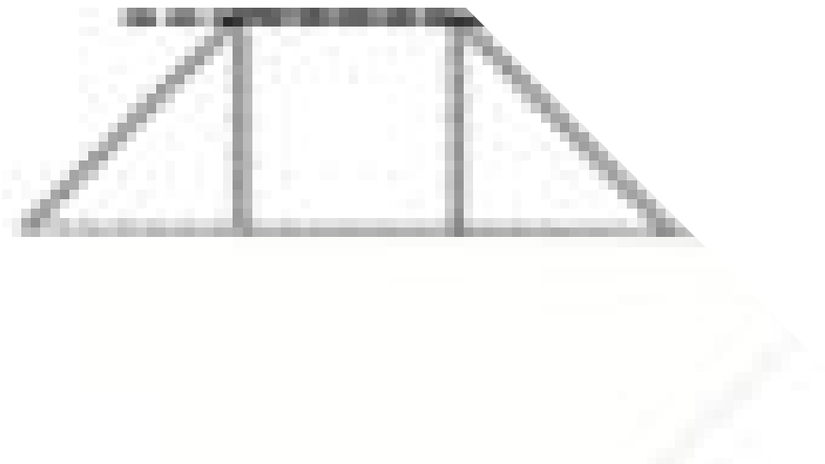
Concept Development

What shape do the two triangles and the square make together?



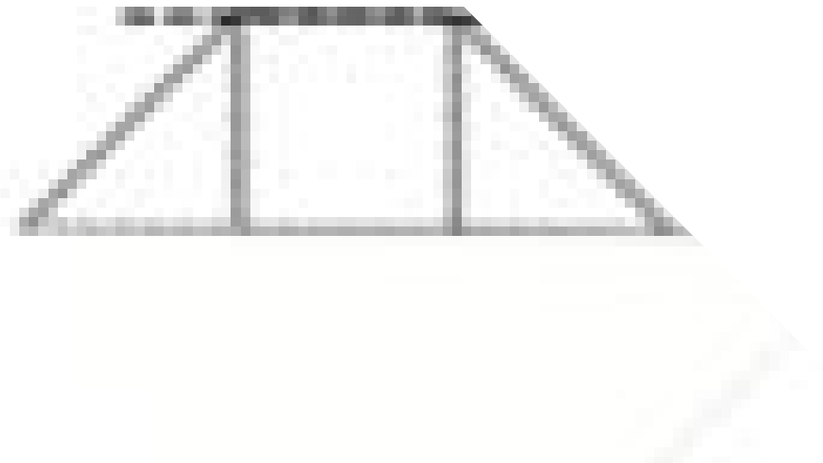
Concept Development

A smaller trapezoid!



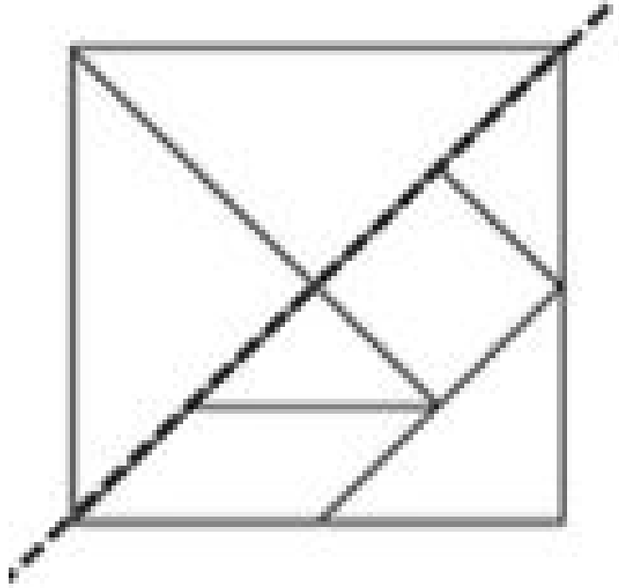
Concept Development

Now, let’s cut apart all of the last pieces.



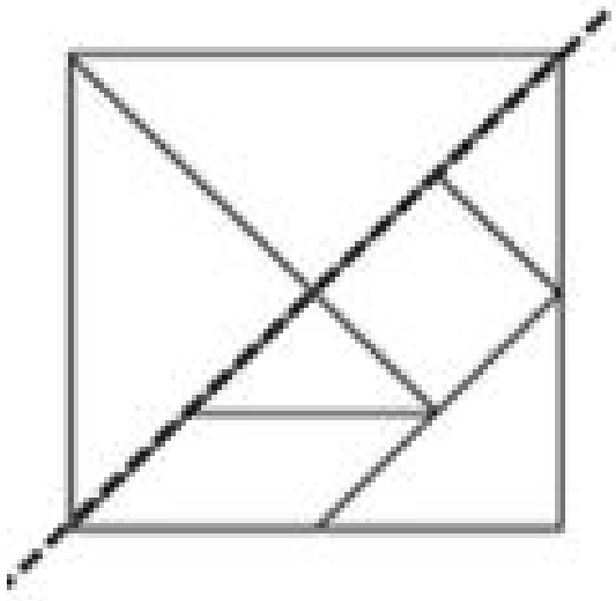
Concept Development

Put your pieces back to form the large square we started with.



Concept Development

Great job! These seven pieces that form a large square are called a tangram. You can make lots of different and interesting shapes by combining some or all of the parts. Let’s use just the two largest triangles. Put all the other pieces to the side.

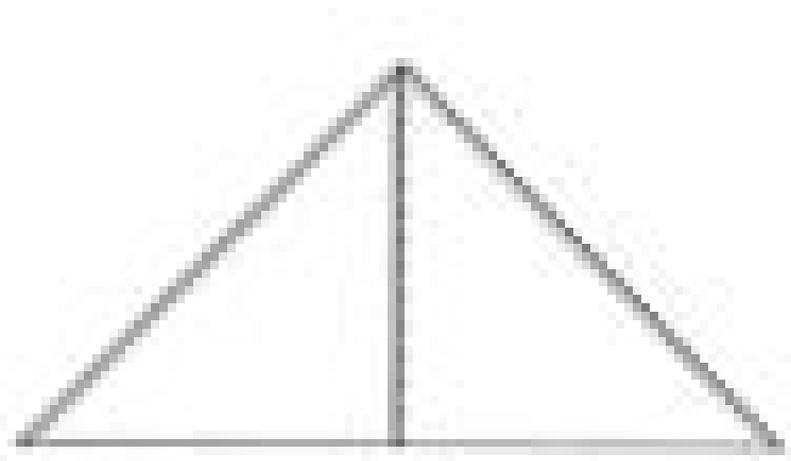


Concept Development

If I leave these pieces the way they were, what shape do they make when they are together?

Concept Development

A large triangle!



Concept Development

Move the shapes around, and see if you can make another shape using those same triangles.

Concept Development

What shape did you make?

Concept Development

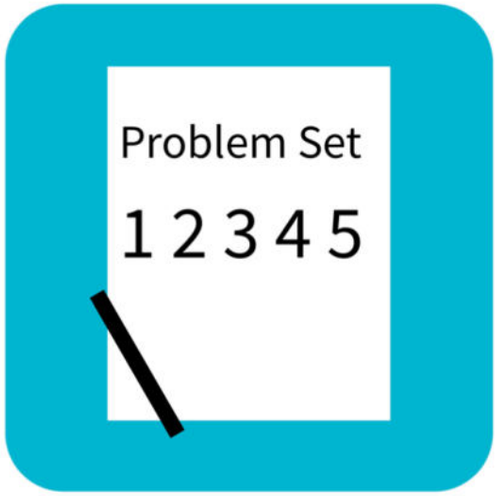
Did you made a square. Did you make a parallelogram?

Concept Development

With your partner, take two or three of the same tangram pieces, and try to each make a different shape using the same pieces. Here's a hint: You may want to flip over your pieces, turn them, or slide them around to make the new shapes.

Concept Development

Move the shapes around, and see if you can make another shape using the same pieces.

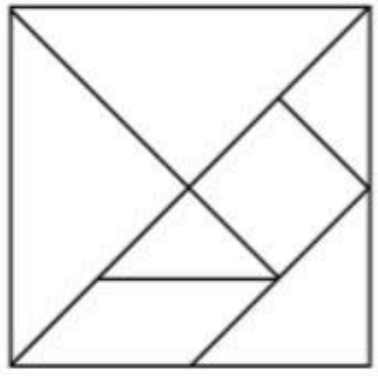


Problem Set

Name _____ Date _____

1.

a. How many shapes were used to make this large square?



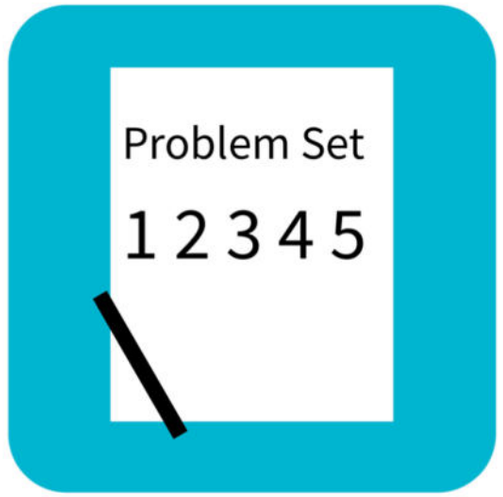
There are _____ shapes in this large square.

b. What are the names of the 3 types of shapes used to make the large square?

_____ _____ _____

2. Use 2 of your tangram pieces to make a square. Which 2 pieces did you use? Draw or trace the pieces to show how you made the square.

3. Use 4 of your tangram pieces to make a trapezoid. Draw or trace the pieces to show the shapes you used.



Problem Set

4. Use all 7 tangram pieces to complete the puzzle.

5. With a partner, make a bird or a flower using all of your pieces. Draw or trace to show the pieces you used on the back of your paper. Experiment to see what other objects you can make with your pieces. Draw or trace to show what you created on the back of your paper.

Debrief

Which shapes are used to make the large square we call a tangram? Which smaller shapes can be seen inside the tangram square?

Debrief

Look at Problem 2. Share how you made a square. Could you have used other tangram pieces to make the square?

Debrief

Look at Problem 3. Share how you made a trapezoid with four pieces. Could you have made a trapezoid with fewer pieces? Demonstrate your solution. Compare the similarities and differences.

Debrief

How did you cover the picture in Problem 4? Did everyone use the same pieces in the same places? Why or why not?

Debrief

Think about today's Fluency Practice. Did you get better at a slow-me-down problem today? Did you do anything to make that happen?

Exit Ticket

Name _____ Date _____

Use words or drawings to show how you can make a larger shape with 3 smaller shapes. Remember to use the names of the shapes in your example.