Reteach Packet for NC.3.G.1

Page 1- Directions (this page)

Both packets of pages are scripted for you. If you follow the script, it will be easier for you.

Pages 2 – 10 This packet can be done with the LC and the student. It serves more as guided practice.

P. 11 The shapes A – L to cut out for the first packet.

p. 12 -23 The more challenging independent packet (Once you feel the students have mastered these steps you can move on to the independent practice in the other packets.)

Page. 24 A stand alone activity to solve breaking apart shapes.

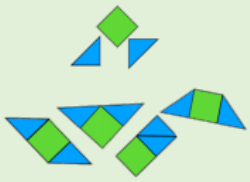
*Please send worksheets back to your math teacher via email or file share.

**All worksheets provided in this packet come from commoncoreworksheets.com and are not aligned with NC standards but a great resource to practice the expectations with the standards.

Clarification

In this standard, students explore with triangles and quadrilaterals. Students move beyond identifying and classifying triangles and quadrilaterals to manipulating two or more shapes to create other triangles and quadrilaterals. Students should be able to describe the shapes they have composed using informal geometric terminology and understand the relationship between the components of the new shape.

For example:
Students can manipulate two right triangles to create another triangle. They can also manipulate the triangles to compose a rectangle.



Students can manipulate a square and two triangles to create a variety of triangles and quadrilaterals. Students should be able to describe the composite shapes using attributes of triangles and quadrilaterals.

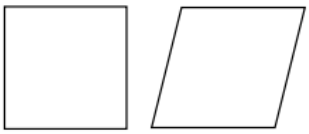
Students examine the properties of quadrilaterals and determine whether or not a shape is a quadrilateral. Students understand that a quadrilateral must be a closed figure with four straight sides and four angles and should be able to describe the characteristics of quadrilaterals including details about the angles and the relationship between opposite sides. Students should able to sort geometric figures and identify squares, rectangles, rhombuses, parallelograms, and trapezoids as quadrilaterals.

Note: North Carolina has adopted the exclusive definition for a trapezoid. A trapezoid is a quadrilateral with *exactly* one pair of parallel sides.

Checking for Understanding

Draw a picture of a square. Draw a picture of a rhombus.
How are they alike? How are they different?

Possible response:



A square and a rhombus both have 4 sides. All four sides are the same length. A square has four equal angles, and a rhombus does not. The opposite angles are equal.

Concept Development (31 minutes)

Materials: (T) 2 rulers (S) Index card for use as right angle tool, polygons (A–L) (Template), ruler, Problem Set, scissors

Part 1: Group polygons by attributes.

Pass out the index cards and Template.

T: We'll use these cards as tools. Put a finger on each corner.

S: (Touch each corner.)

T: Remember from second grade that we call the point where sides meet to make a corner an *angle*. These are **right angles** because they have square corners. We'll use our cards as right angle tools to help us find other shapes that have right angles. (Save the right angle tools for the entire module.)

T: Now, cut out shapes A–L on your template.

S: (Cut.)

T: Look at your shapes. Discuss with a partner: What are some different ways we can group these shapes together?

S: We can group them by name, like all the squares together. → We can group them by the number of sides. → We can also group them by the number of angles.

T: Remember from second grade that closed shapes like these that have no gaps or overlaps between the straight sides are called **polygons**. Polygons with four straight sides are called **quadrilaterals**. Tell your partner what a quadrilateral is, and then find and group the quadrilaterals.

S: A quadrilateral is a polygon with four sides. (Group the quadrilaterals.)

T: What do you notice about the polygons you grouped?

S: They don't look the same. → Some are slanted, and some are boxy. → Some are squares and rectangles, but others are strange looking. → One polygon even looks like a boomerang. → They have four angles.

T: The polygons look different, but they share the attributes of having four sides and four angles. Complete the first row of the chart on the Problem Set. Make sure to sketch one polygon from the group.

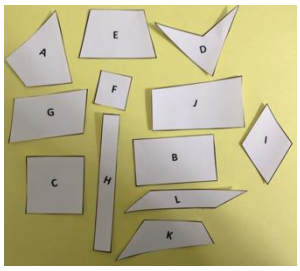
NOTES ON VOCABULARY:

All of the bold-type terms in this lesson were introduced in Grade 2 Module 8. However, given the specificity of the words and the time that has passed since students' work in Grade 2 Module 8, it may be best to approach teaching the vocabulary as if it were new.

NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Clarify for English language learners and others the term *group.* In past modules, they have *grouped* like units, such as 10 tens to make 100 or 3 fives to make 15. Here, *grouping* does not mean bundling units that are exactly the same but rather sorting polygons by one or more shared attribute.

4-sided:



T: Next, we'll find and group **trapezoids**. These are quadrilaterals that have at least one set of **parallel** sides. Think of parallel sides like the two side lines of a capital *H*, or a slanted *H*, since not all parallel sides stand vertical. (Demonstrate using two rulers.) Imagine these two lines go on forever. Do you think they will ever cross? Why or why not?

S: I don't think they will cross. → No, they won't cross because they're straight and going in the same direction all the time.

T: (Slant the rulers so they are not parallel anymore but are still not touching.) These lines are not touching. Are they parallel? Why or why not?

S: No. The sides don't look like an *H* anymore. → If we imagine the lines keep going, they will eventually cross!

T: If trapezoids must have *at least* one set of parallel sides, can they have more than one set?

S: Yeah. *At least* means one or more.

T: Group the trapezoids. Complete the second row of the chart on the Problem Set. Make sure to sketch one polygon from the group.

S: (Group all shapes, except A, D, and K, and sketch one shape.)

T: What do you notice about the polygons you grouped?

S: I found a bunch! → No. There's only one shape that has only one set of parallel sides. Polygon E! → Remember, though, a trapezoid has *at least* one set! That's almost all of them!

T: Now we'll find and group **parallelograms**. These are four-sided polygons that have two sets of parallel sides.

T: Group the parallelograms. Then, complete the next row of the chart on your Problem Set.

S: (Group the polygons, and complete the chart.)

T: Now, use your right angle tool to measure and group all the polygons that have four right angles. Then, complete the chart.

S: (Measure, group, and complete the chart.)

T: Next, find and group all the squares. Which attributes make squares special?

S: They have four equal sides and four right angles.

T: Use your ruler and right angle tool to confirm that with these polygons. Then, complete the chart.

S: (Measure, group, and complete the chart.)

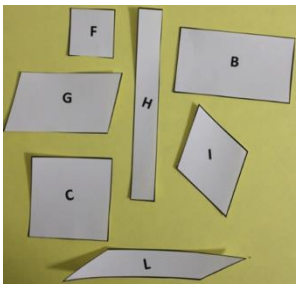
NOTES ON TRAPEZOIDS:

According to the K–6 Geometry Progressions, the term *trapezoid* can have two different meanings:

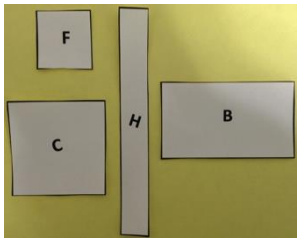
- Exclusive Definition: A trapezoid is a quadrilateral with exactly one pair of parallel sides.
- Inclusive Definition: A trapezoid is a quadrilateral with at least one pair of parallel sides.

A Story of Units uses the inclusive definition. Therefore, a parallelogram is also considered a trapezoid.

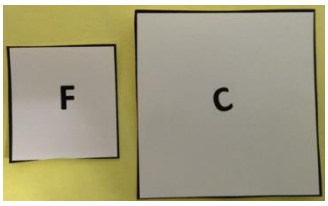
2 parallel sides:



4 right angles:



Squares:



Part 2: Analyze quadrilaterals.

T: In our set of polygons A–L, did the number of polygons get smaller or larger as we added attributes?

S: It got smaller.

T: Discuss with your partner why you think the number of polygons in each group got smaller as we added attributes.

S: I think it's because the attributes in our chart become more special. The last category only includes the most special polygon, a square, because it has to have four right angles *and* four equal sides. → Each time we added a new attribute, fewer polygons belonged to the group.

T: As the attributes become more specific, fewer shapes in our set share all of the attributes. Look at Polygons C and F. They are included in every group. Why do you think that is?

S: They have four sides, two sets of parallel lines, and four right angles.

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T: Why aren't Polygons B and H included in the last category? These specific rectangles have four sides, two sets of parallel lines, and four right angles.

S: Polygons B and H don't have all equal sides.

T: Look at Polygon I. It has four equal sides and two sets of parallel lines. Why isn't it included in the last category?

S: It doesn't have four right angles. → It needs to have them all, not just one attribute.

T: Let's make a new category, one that has shapes with 4 equal sides. Work with your partner.

T: (Move Polygons C, F, and I to form a new group.) A shape with 4 equal sides is called a **rhombus**.

T: Why is a square a rhombus?

S: Because it has 4 equal sides!

T: Why isn't shape I a square?

S: Because it doesn't have right angles!

Part 3: Decompose quadrilaterals into two triangles.

T: Problem 4 asks you to use a straightedge to draw a line between opposite corners in each quadrilateral you drew in the chart. This kind of line is called a **diagonal** line. Do that now.

S: (Draw diagonals in each polygon.)

T: Which new polygons did you make by drawing the diagonal line?

S: Triangles.

T: Complete Problem 4 on your Problem Set.

T: Pick other polygons we used that you did not draw on your chart. Draw diagonal lines inside the polygons. Do you still get two triangles? (Allow time for students to draw.)

S: Yes!

T: All quadrilaterals are made up of two triangles.

Students should now go back and finish Problems 2 and 3 on the Problem Set.

Student Debrief (10 minutes)

Lesson Objective: Compare and classify quadrilaterals.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

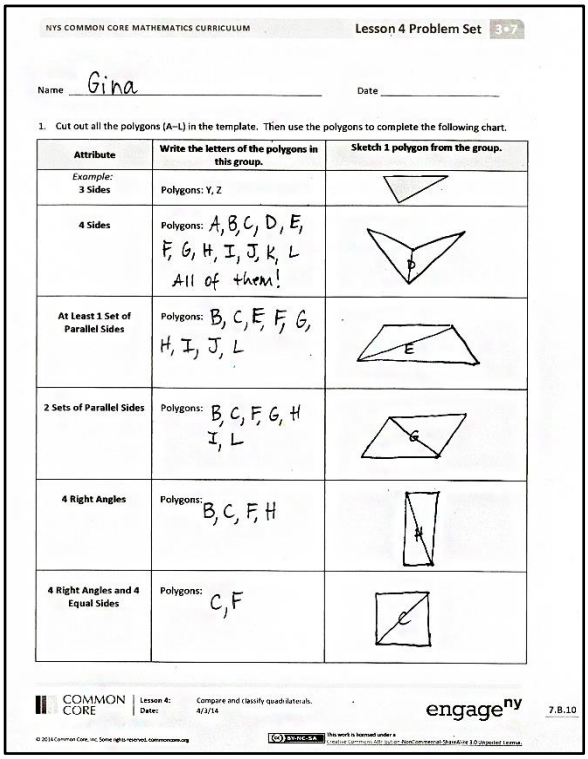
Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class. Look for misconceptions or misunderstandings that can be addressed in the Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.

Any combination of the questions below may be used to lead the discussion.

- How does grouping quadrilaterals by **attributes**, like you did in Problem 1, help us see the similarities and differences between the **polygons**?
- Share sketches of parallelograms from Problem 3. Have students describe **parallel** lines through their color-coded tracing.
- For Problem 4, share drawings of different quadrilaterals to reinforce how every quadrilateral can be decomposed into two triangles.
- What math vocabulary did we use today to name polygons with four sides? (**Quadrilateral**.) At least one set of parallel sides? (**Trapezoid**.) Two sets of parallel sides? (**Parallelogram**.) A shape with 4 equal sides? (**Rhombus.**) An angle that makes square corners? (**Right angle**.) The line between opposite corners in each quadrilateral? (**Diagonal**.)

Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students' understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons. The questions may be read aloud to the students.



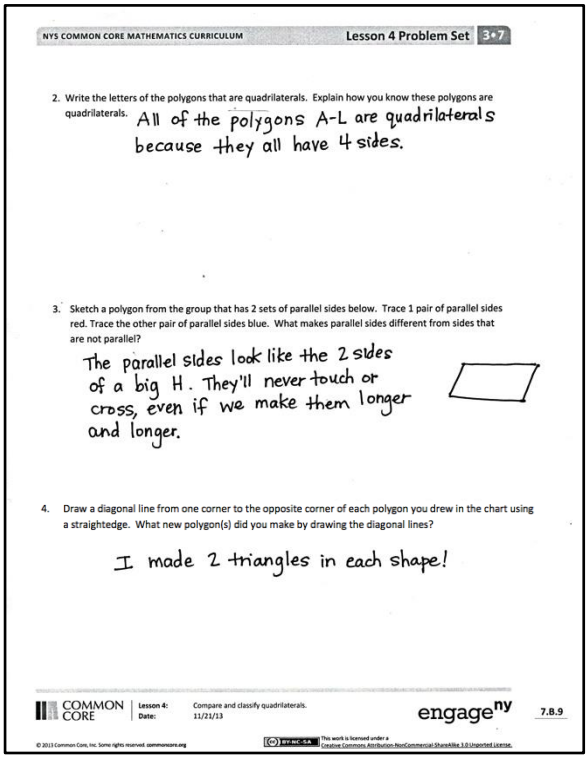
NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 4 Problem Set 3•7

Name Gina Date

1. Cut out all the polygons (A–L) in the template. Then use the polygons to complete the following chart.

Attribute	Write the letters of the polygons in this group.	Sketch 1 polygon from the group.
Example: 3 Sides	Polygons: Y, Z	
4 Sides	Polygons: A, B, C, D, E, F, G, H, I, J, K, L All of them!	D
At Least 1 Set of Parallel Sides	Polygons: B, C, E, F, G, H, I, J, L	E
2 Sets of Parallel Sides	Polygons: B, C, F, G, H I, L	G
4 Right Angles	Polygons: B, C, F, H	H
4 Right Angles and 4 Equal Sides	Polygons: C, F	C

COMMON CORE Lesson 4: Compare and classify quadrilaterals. Date: 4/3/14 engage^ny 7.B.10



NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 4 Problem Set 3•7

2. Write the letters of the polygons that are quadrilaterals. Explain how you know these polygons are quadrilaterals. All of the polygons A-L are quadrilaterals because they all have 4 sides.

3. Sketch a polygon from the group that has 2 sets of parallel sides below. Trace 1 pair of parallel sides red. Trace the other pair of parallel sides blue. What makes parallel sides different from sides that are not parallel?

The parallel sides look like the 2 sides of a big H. They'll never touch or cross, even if we make them longer and longer.

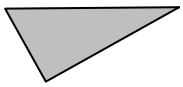
4. Draw a diagonal line from one corner to the opposite corner of each polygon you drew in the chart using a straightedge. What new polygon(s) did you make by drawing the diagonal lines?

I made 2 triangles in each shape!

COMMON CORE Lesson 4: Compare and classify quadrilaterals. Date: 11/21/13 engage^ny 7.B.9

Name _____ Date _____

1. Cut out all the polygons (A–L) in the Template. Then, use the polygons to complete the following chart.

Attribute	Write the letters of the polygons in this group.	Sketch 1 polygon from the group.
Example: **3 Sides**	Polygons: Y, Z	
4 Sides	Polygons:	
At Least 1 Set of Parallel Sides	Polygons:	
2 Sets of Parallel Sides	Polygons:	
4 Right Angles	Polygons:	
4 Right Angles and 4 Equal Sides	Polygons:	

2. Write the letters of the polygons that are quadrilaterals. Explain how you know these polygons are quadrilaterals.

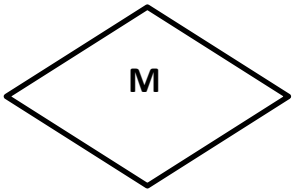
3. Sketch a polygon below from the group that has 2 sets of parallel sides. Trace 1 pair of parallel sides red. Trace the other pair of parallel sides blue. What makes parallel sides different from sides that are not parallel?

4. Draw a diagonal line from one corner to the opposite corner of each polygon you drew in the chart using a straightedge. What new polygon(s) did you make by drawing the diagonal lines?

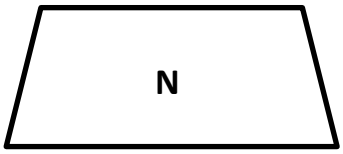
Name _____ Date _____

List as many attributes as you can to describe each polygon below.

1.

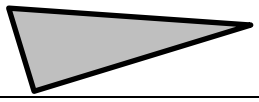
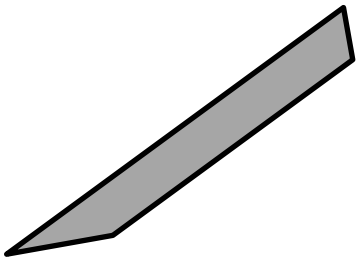
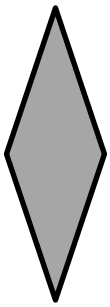
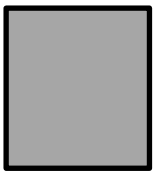


2.

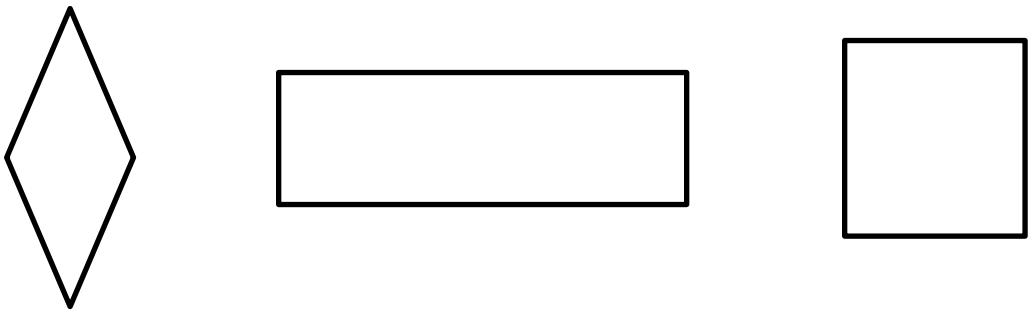


Name _____ Date _____

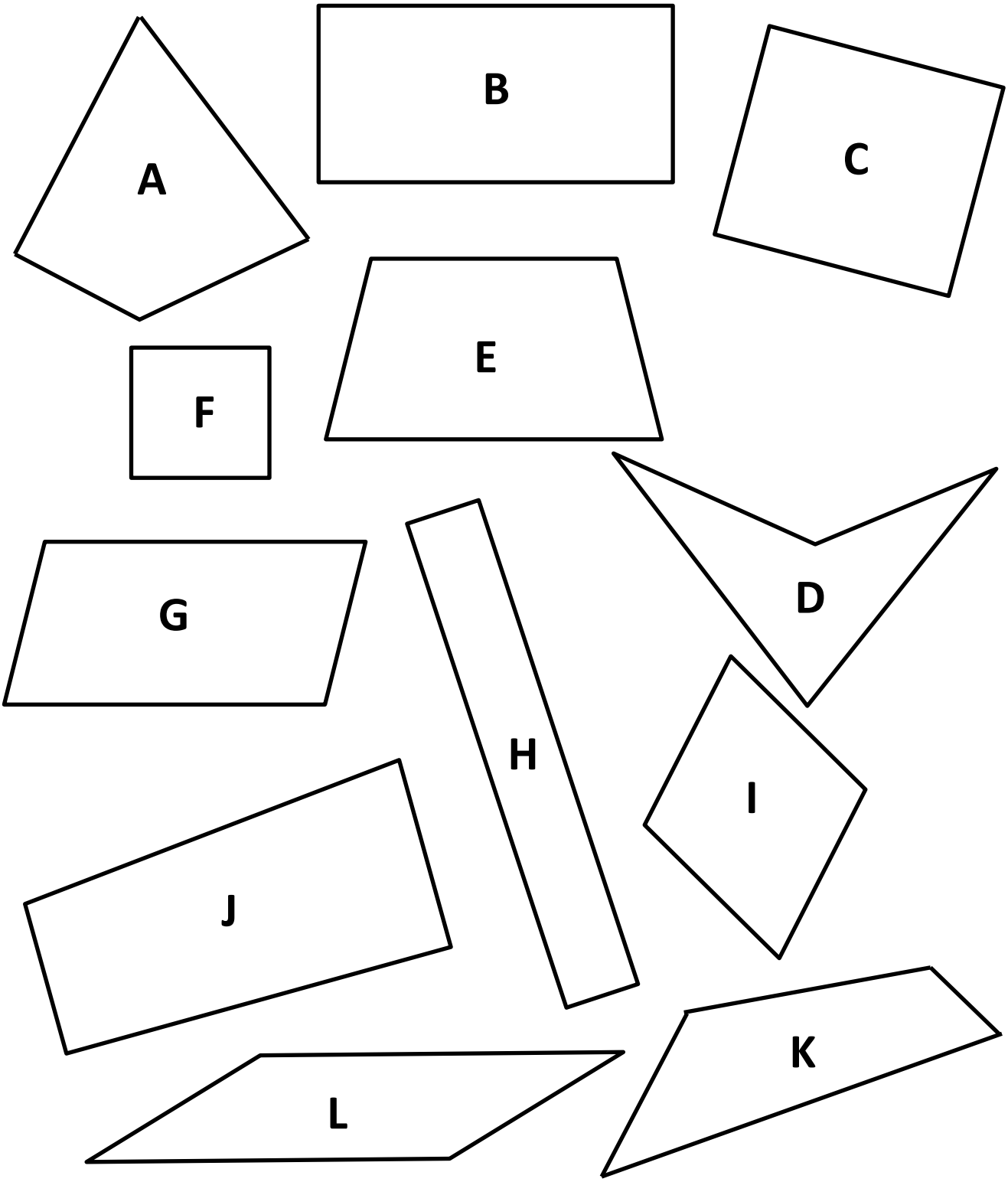
1. Complete the chart by answering true or false.

Attribute	Polygon	True or False
Example: **3 Sides**		True
4 Sides		
2 Sets of Parallel Sides		
4 Right Angles		
Quadrilateral		

2. a. Each quadrilateral below has at least 1 set of parallel sides. Trace each set of parallel sides with a colored pencil.



b. Using a straightedge, sketch a different quadrilateral with at least 1 set of parallel sides.



polygons (A–L)

Equivalent Counting with Units of 6 (4 minutes)

Note: This activity builds fluency with multiplication facts using units of 6. The progression builds in complexity. Work students up to the highest level of complexity where they can confidently participate.

T: Count to 10. (Write as students count. See the chart below.)

S: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

1	2	3	4	5	6	7	8	9	10
1 six	2 sixes	3 sixes	4 sixes	5 sixes	6 sixes	7 sixes	8 sixes	9 sixes	10 sixes
6	12	18	24	30	36	42	48	54	60
1 six	12	3 sixes	24	5 sixes	36	7 sixes	48	9 sixes	60
6	2 sixes	18	4 sixes	30	6 sixes	42	8 sixes	54	10 sixes

T: (Write 1 six beneath the 1.) Count to 10 sixes. (Write as students count.)

S: 1 six, 2 sixes, 3 sixes, 4 sixes, 5 sixes, 6 sixes, 7 sixes, 8 sixes, 9 sixes, 10 sixes.

T: Count by sixes to 60. (Write as students count.)

S: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60.

T: (Write 1 six beneath the 6. Write 12 beneath the 12.) I'm going to give you a challenge. Let's alternate between saying the units of six and the number. (Write as students count.)

S: 1 six, 12, 3 sixes, 24, 5 sixes, 36, 7 sixes, 48, 9 sixes, 60.

T: (Write 6 beneath 1 six and 2 sixes beneath the 12.) Let's alternate again. (Write as students count.)

S: 6, 2 sixes, 18, 4 sixes, 30, 6 sixes, 42, 8 sixes, 54, 10 sixes.

Classify the Polygon (4 minutes)

Materials: (S) Personal white board

Note: This activity reviews identifying attributes and naming polygons.

T: (Project a trapezoid.) How many sides does this polygon have?

S: Four sides.

T: What do we call polygons that have four sides?

S: Quadrilaterals.

T: How many sets of parallel lines does this quadrilateral have?

S: One set.

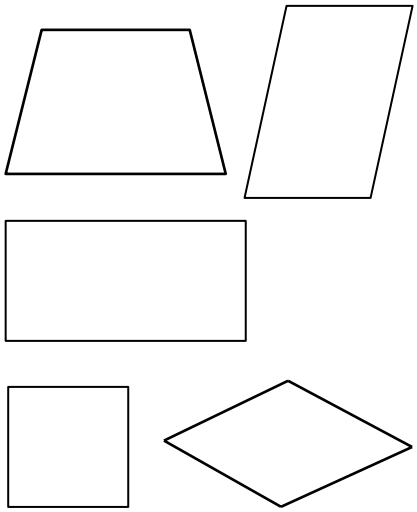
T: What do we call quadrilaterals that have at least one set of parallel lines?

S: Trapezoids.

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

English language learners and others who may not be able to quickly articulate the names of polygons might benefit from adjusting the questions. For example, ask, "Is this a quadrilateral? How many sides does a quadrilateral have?"

T: (Project a parallelogram with no right angles.) Is this polygon a quadrilateral?
S: Yes.
T: How many right angles does this particular quadrilateral have?
S: Zero right angles.
T: Is this quadrilateral a trapezoid?
S: Yes.
T: Why?
S: It has at least one set of parallel lines.
T: How many sets of parallel sides does it have?
S: Two sets of parallel sides.
T: What do we call all quadrilaterals that have two sets of parallel sides?
S: Parallelograms.
T: (Project a rectangle that is not a square.) Is this polygon a quadrilateral?
S: Yes.
T: Write how many right angles this quadrilateral has.
S: (Write 4.)
T: Is this quadrilateral a trapezoid?
S: Yes.
T: Why?
S: It has at least one set of parallel lines.
T: Is this trapezoid also a parallelogram?
S: Yes.
T: Why?
S: It has two sets of parallel sides.
T: Is this parallelogram also a rectangle?
S: Yes.
T: Why?
S: It has two sets of parallel sides and four right angles.
T: (Project a rhombus that is not a square.) Is this polygon a quadrilateral?
S: Yes.
T: Why?
S: It has four sides.
T: Write how many right angles this quadrilateral has.
S: (Write 0.)
T: Is this quadrilateral a trapezoid?
S: Yes.



T: Why?
S: It has at least one set of parallel lines.
T: Is this trapezoid also a parallelogram?
S: Yes.
T: Why?
S: It has two sets of parallel sides.
T: Is this parallelogram also a rectangle?
S: No.
T: Why?
S: It has two sets of parallel sides but no right angles.
T: The sides of this parallelogram are equal. What do we call a parallelogram with 4 equal sides?
S: A rhombus.
T: What is a rhombus with 4 right angles called?
S: A square!
T: How else can a square be classified?
S: Trapezoid. → Quadrilateral. → Rectangle. → Parallelogram. → Polygon.

Concept Development (35 minutes)

Materials: (S) Right angle tool, Polygons M–X (Template), ruler, Problem Set, scissors

Problem 1: Group polygons by attributes.

T: Look at Polygons M–X. Compare them with yesterday's polygons. What do you notice?
S: Now there are many different kinds of polygons. → All of the polygons aren't quadrilaterals. I see triangles, some quadrilaterals, hexagons, and funny looking polygons, too.
T: Take out your right angle tools and rulers.
S: (Take out the tools.)
T: Look at the chart on your Problem Set. Yesterday we grouped polygons with four sides. Today we're first going to group polygons with all equal sides. What tools will we need to make sure our work is precise?
S: A ruler. → A centimeter ruler. → An inch ruler.
T: Look at your ruler, and talk to a partner. Which unit will be the most precise: inches, half inches, quarter inches, or centimeters?
S: Inches are the biggest unit, so they won't be the most precise. → Half inches and centimeters are smaller than inches. → A quarter inch is even smaller than a half inch and a centimeter. → We should use the quarter inch because it's the smallest unit, so it will be the most precise.
T: Work with your partner to measure the sides of all of your polygons to the nearest quarter inch. Label the inside side lengths to help you remember. Then, cut out Polygons M–X.
S: (Measure, label, and cut.)

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T: Group into categories of *all sides are equal* and *not all sides are equal*. Then, complete the first two sections of your chart.

S: (Group and complete the chart.)

T: Did you group each of your polygons into one of the categories?

S: Yes!

T: The next two parts of our chart start with the words *at least 1*. When it says *at least 1*, can the polygon have more than one?

S: Yes. It just means that you need to have one for sure.

T: Use your right angle tool to measure, and group the polygons that have at least 1 right angle.

Have students complete the rest of the chart. Circulate to look for and correct any misconceptions.

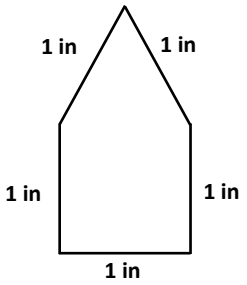
T: Let's examine the polygons that have all equal sides more closely. Look at Polygon S. What do you know about the side lengths?

S: They're all the same!

T: What do you know about the angles?

S: They're all right angles. → So, the angles are all the same, too!

T: A polygon with all equal sides and all equal angles is called a **regular polygon**. (Project the polygon as shown.) How many sides does this polygon have?



S: Five sides!

T: What do we call a polygon with five sides?

S: A pentagon!

T: Talk to a partner. Is this a regular pentagon?

S: All the sides are equal. → But it doesn't look like all the angles are equal. → Yeah. It looks like there are two right angles, but the angle at the top looks smaller than a right angle. → So, this pentagon can't be a regular pentagon!

T: You're right! This isn't a regular pentagon because the sides are all equal, but the angles aren't all equal.

Problem 2: Compare polygons.

T: Count each polygon's sides. Then, write the number of sides under the polygon's letter. Do that now. (Allow students time to finish.) Now, group the polygons with the same number of sides.

S: (Group.)

T: Compare the polygons in each group. Are they the same type of polygon? For example, Polygon U is a six-sided polygon, or a hexagon. Polygon T also has six sides. Is Polygon T a hexagon, too?

S: Polygon T doesn't look like a hexagon. → They are both still hexagons. It's just that Polygon U has all equal sides. That's why it looks like the more familiar one.

T: It's true. Remember we saw all different types of quadrilaterals. Some looked familiar to us, like a square or rectangle, and others were more unusual. But they all had four sides and were all still quadrilaterals.

T: Now, spread out your polygons. I'll call out an attribute. You hold up a polygon that fits the attribute. Ready? Show a polygon that does not have *all* equal sides.

S: (Show Polygon N, O, R, T, Q, V, or X.)

T: Show a polygon that has *exactly* one right angle.

S: (Show Polygon Q.)

T: Show a polygon that has four equal sides.

S: (Show Polygon S.)

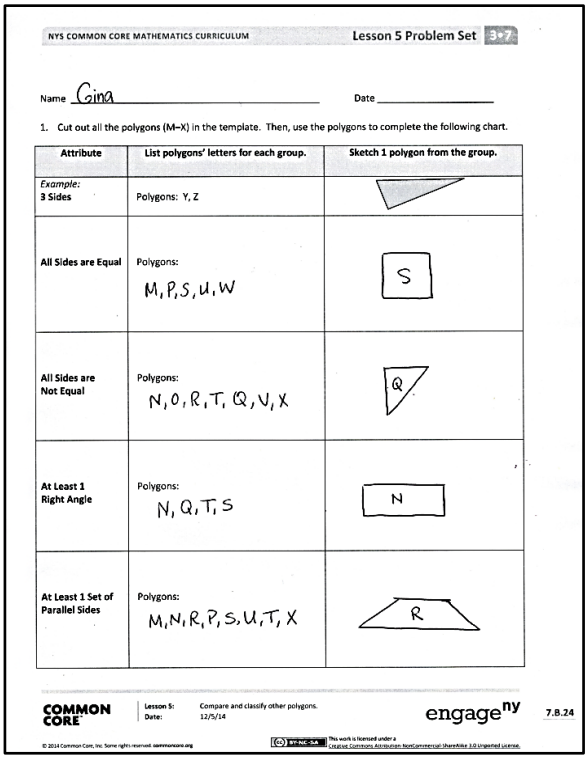
T: Show a polygon that has only one set of parallel lines.

S: (Show Polygon R.)

T: Here's a challenge. Show a polygon that has exactly three sets of parallel lines.

S: (Show Polygon U.)

Have students finish the rest of the Problem Set independently.



NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 5 Problem Set 3•7

Name Gina Date

1. Cut out all the polygons (M–X) in the template. Then, use the polygons to complete the following chart.

Attribute	List polygons' letters for each group.	Sketch 1 polygon from the group.
Example: 3 Sides	Polygons: Y, Z	
All Sides are Equal	Polygons: M, P, S, U, W	S
All Sides are Not Equal	Polygons: N, O, R, T, Q, V, X	Q
At Least 1 Right Angle	Polygons: N, Q, T, S	N
At Least 1 Set of Parallel Sides	Polygons: M, N, R, P, S, U, T, X	R

COMMON CORE Lesson 5: Compare and classify other polygons. Date: 12/5/14 engage^ny 7.B.24

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Student Debrief (10 minutes)

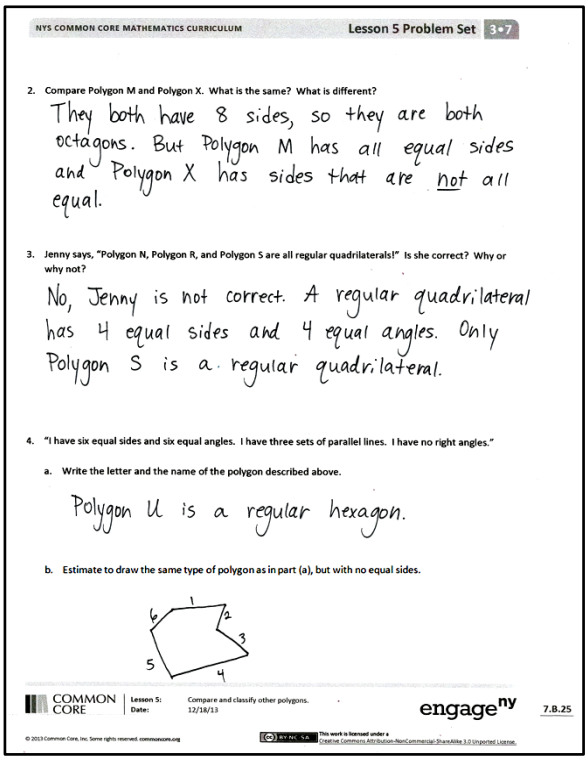
Lesson Objective: Compare and classify other polygons.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class. Look for misconceptions or misunderstandings that can be addressed in the Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.

Any combination of the questions below may be used to lead the discussion.

- Share student work for Problem 3, and compare the three quadrilaterals. Which attributes are the same and different?



NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 5 Problem Set 3•7

2. Compare Polygon M and Polygon X. What is the same? What is different?

They both have 8 sides, so they are both octagons. But Polygon M has all equal sides and Polygon X has sides that are not all equal.

3. Jenny says, "Polygon N, Polygon R, and Polygon S are all regular quadrilaterals!" Is she correct? Why or why not?

No, Jenny is not correct. A regular quadrilateral has 4 equal sides and 4 equal angles. Only Polygon S is a regular quadrilateral.

4. "I have six equal sides and six equal angles. I have three sets of parallel lines. I have no right angles."

a. Write the letter and the name of the polygon described above.

Polygon U is a regular hexagon.

b. Estimate to draw the same type of polygon as in part (a), but with no equal sides.

COMMON CORE Lesson 5: Compare and classify other polygons. Date: 12/18/13 engage^ny 7.B.25

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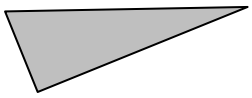
- Compare student sketches in Problem 4(b). Continue to have students draw different polygons on their personal white boards while the teacher calls out different attributes. For example, "Sketch a pentagon with no equal sides; sketch a triangle with one right angle." Have students compare polygons to understand that polygons are defined by the number of sides, not just how they look.
- Was it easier to group quadrilaterals or group polygons with different numbers of sides? Why?
- Tell your partner two attributes of a **regular polygon**. Which quadrilateral is a regular polygon?
- How did today's Fluency Practice connect to the lesson?

Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students' understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons. The questions may be read aloud to the students.

Name _____ Date _____

1. Cut out all the polygons (M–X) in the Template. Then, use the polygons to complete the following chart.

Attribute	List polygons' letters for each group.	Sketch 1 polygon from the group.
Example: **3 Sides**	Polygons: Y, Z	
All Sides Are Equal	Polygons:	
All Sides Are Not Equal	Polygons:	
At Least 1 Right Angle	Polygons:	
At Least 1 Set of Parallel Sides	Polygons:	

2. Compare Polygon M and Polygon X. What is the same? What is different?

3. Jenny says, "Polygon N, Polygon R, and Polygon S are all regular quadrilaterals!" Is she correct? Why or why not?

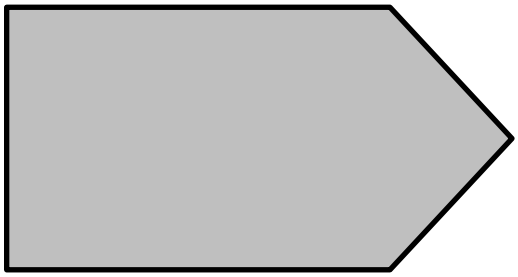
4. "I have six equal sides and six equal angles. I have three sets of parallel lines. I have no right angles."

   a. Write the letter and the name of the polygon described above.

   b. Estimate to draw the same type of polygon as in part (a), but with no equal sides.

Name _____ Date _____

Jonah draws the polygon below. Use your ruler and right angle tool to measure his polygon. Then, answer the questions below.



1. Is Jonah's polygon a regular polygon? Explain how you know.

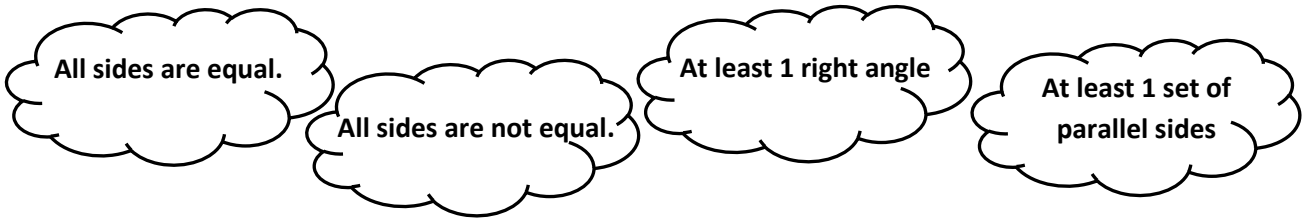
2. How many right angles does his polygon have? Circle the right angles on his polygon.

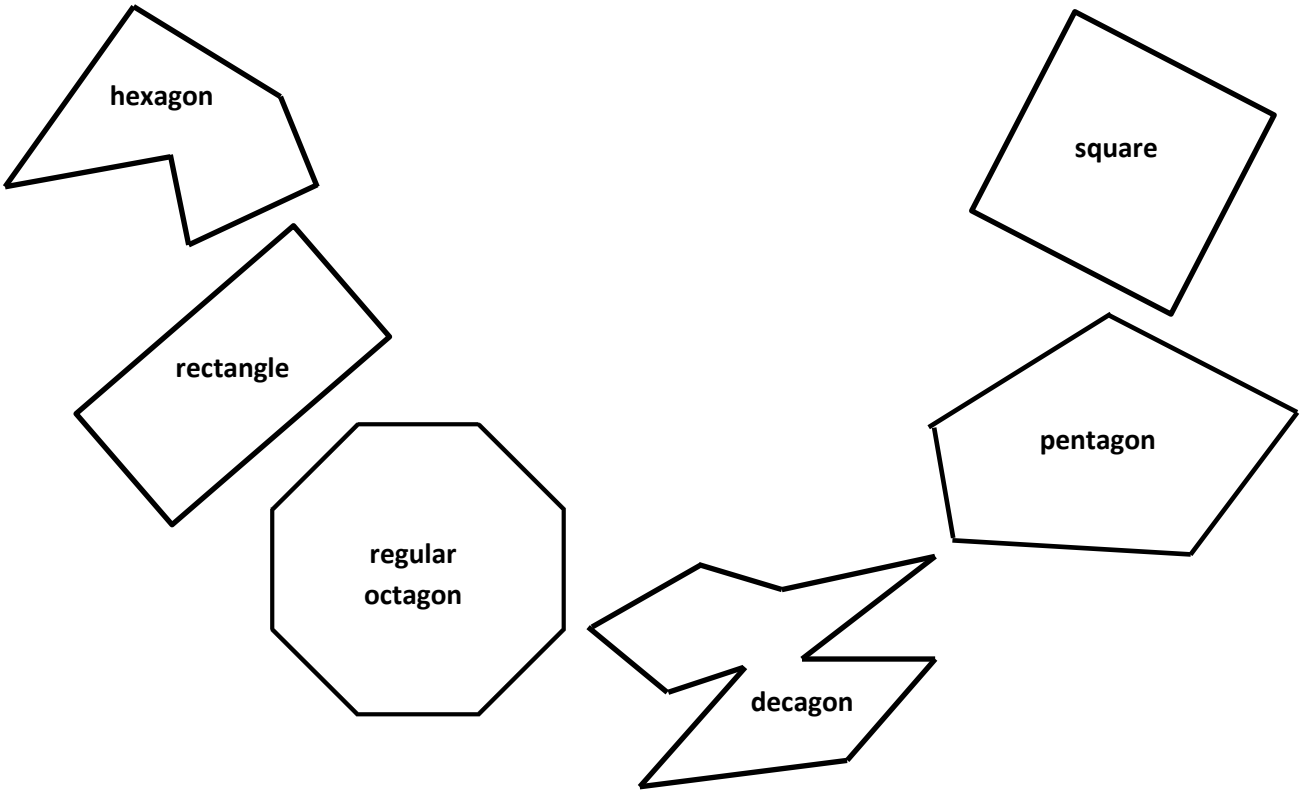
3. How many sets of parallel lines does his polygon have?

4. What is the name of Jonah's polygon?

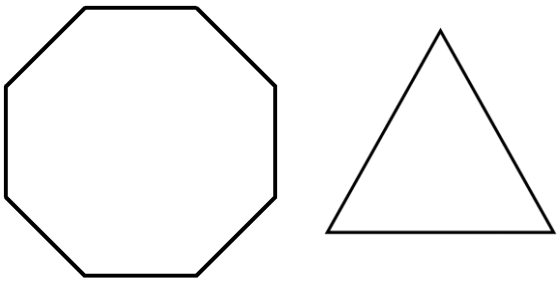
Name _____ Date _____

1. Match the polygons with their appropriate clouds. A polygon can match to more than 1 cloud.

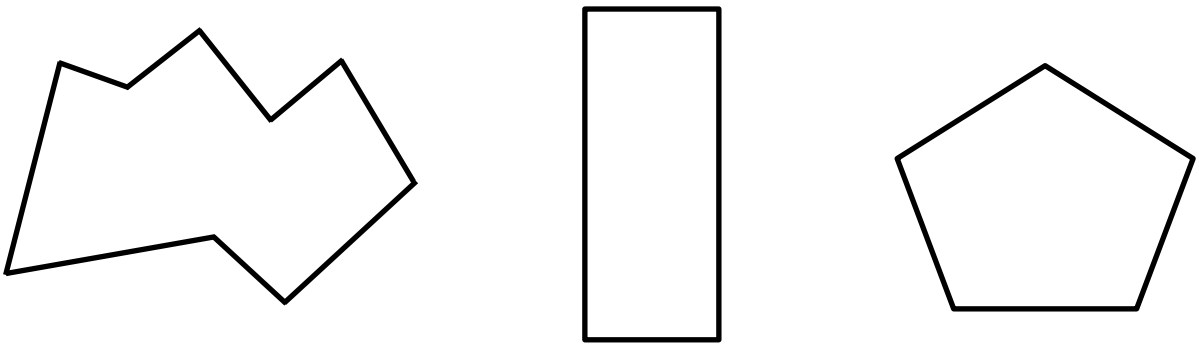


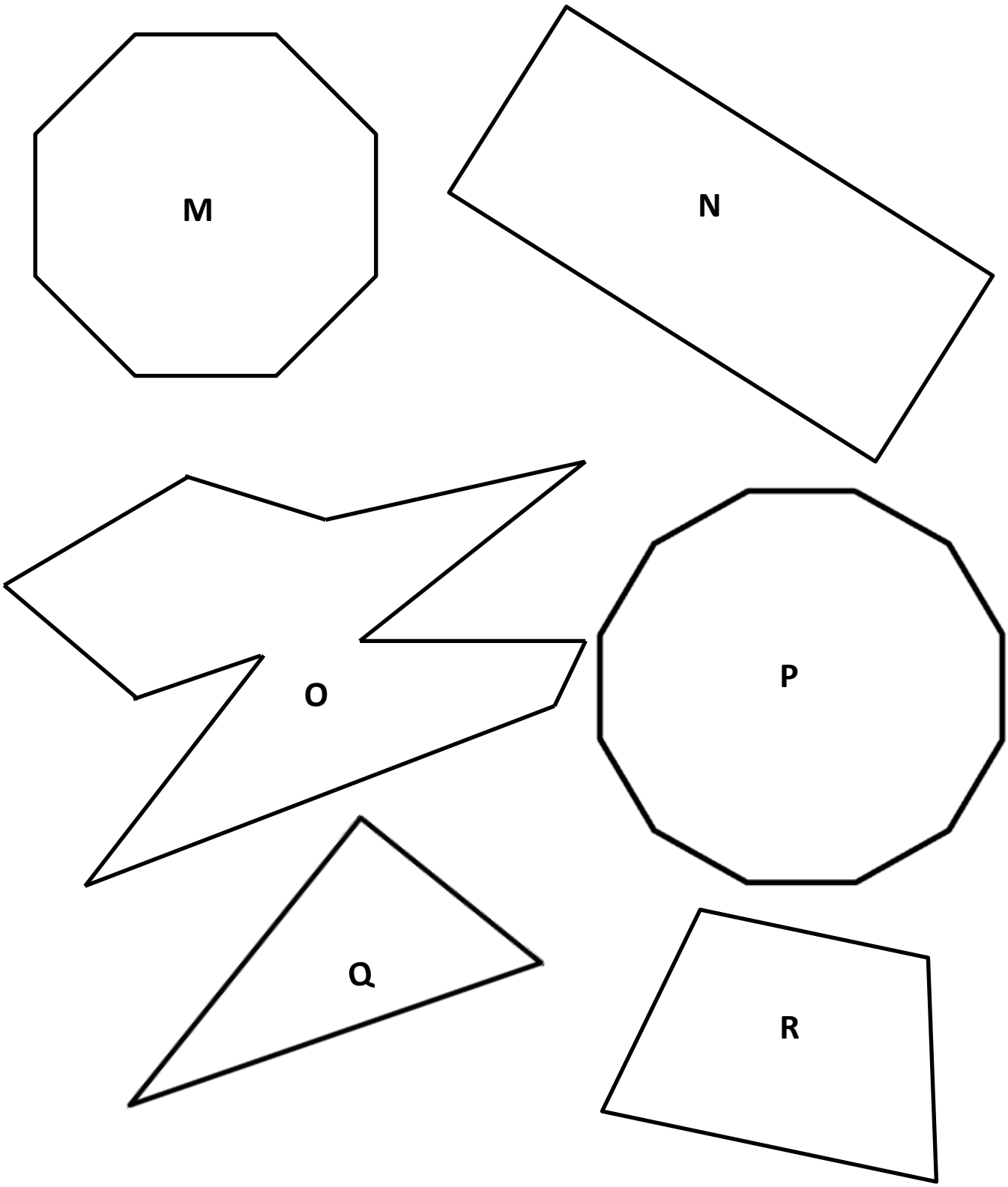


2. The two polygons below are regular polygons. How are these polygons the same? How are they different?



3. Lucia drew the polygons below. Are any of the polygons she drew regular polygons? Explain how you know.

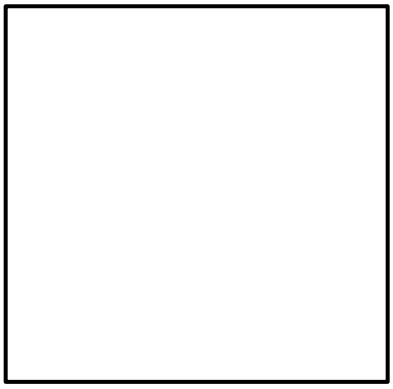




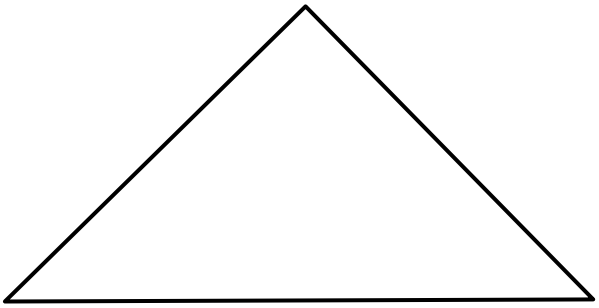
polygons (M–X)

Name _____ Date _____

1. Draw a line to divide the square below into 2 equal triangles.



2. Draw a line to divide the triangle below into 2 equal, smaller triangles.



3. Draw a line to divide the trapezoid below into 2 equal trapezoids.