Materials List:

- Scissors
- Ruler with inches and centimeters
- Polygons M-X templates
- Workbook

Eureka Math

3rd Grade
Module 7
Lesson 5

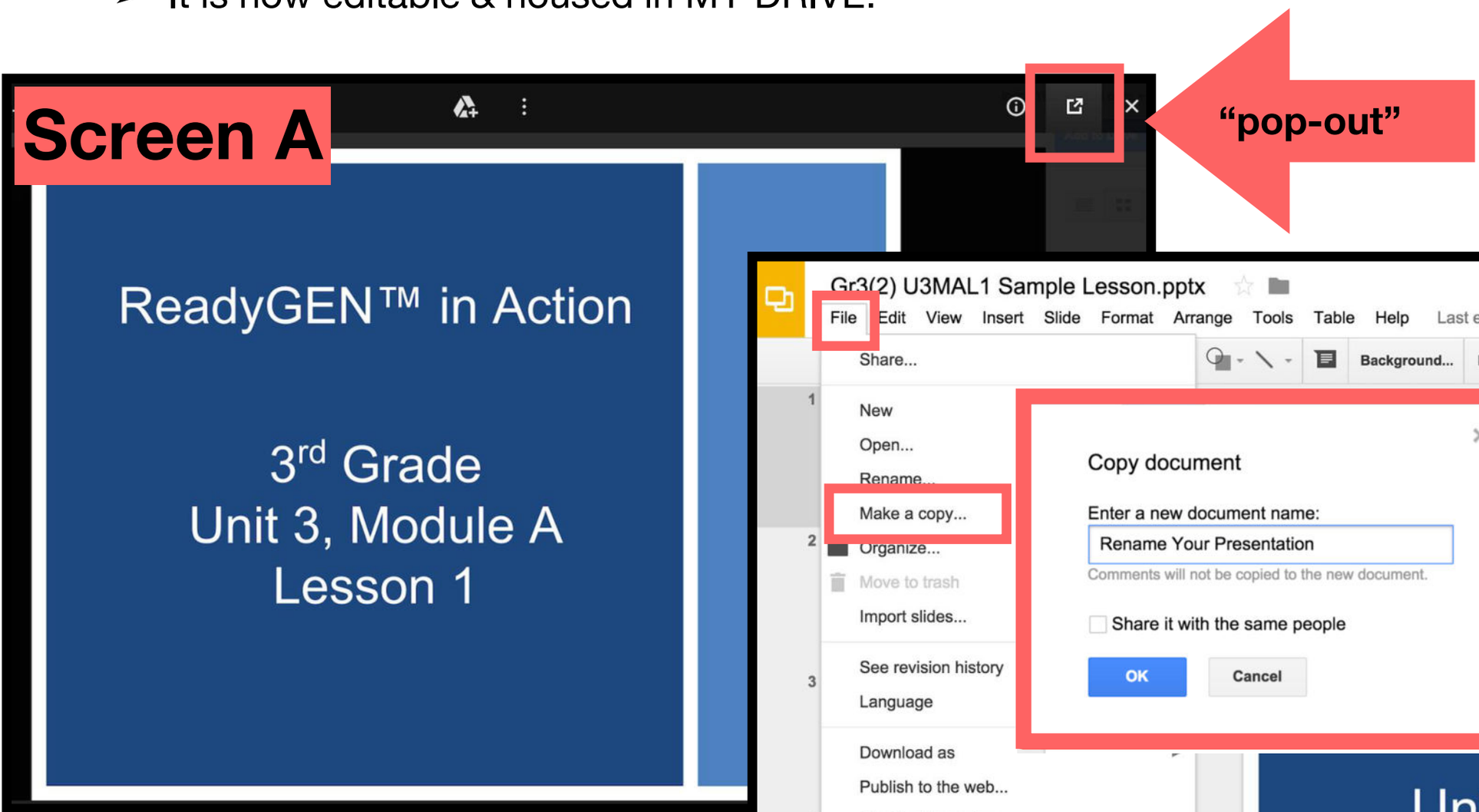
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

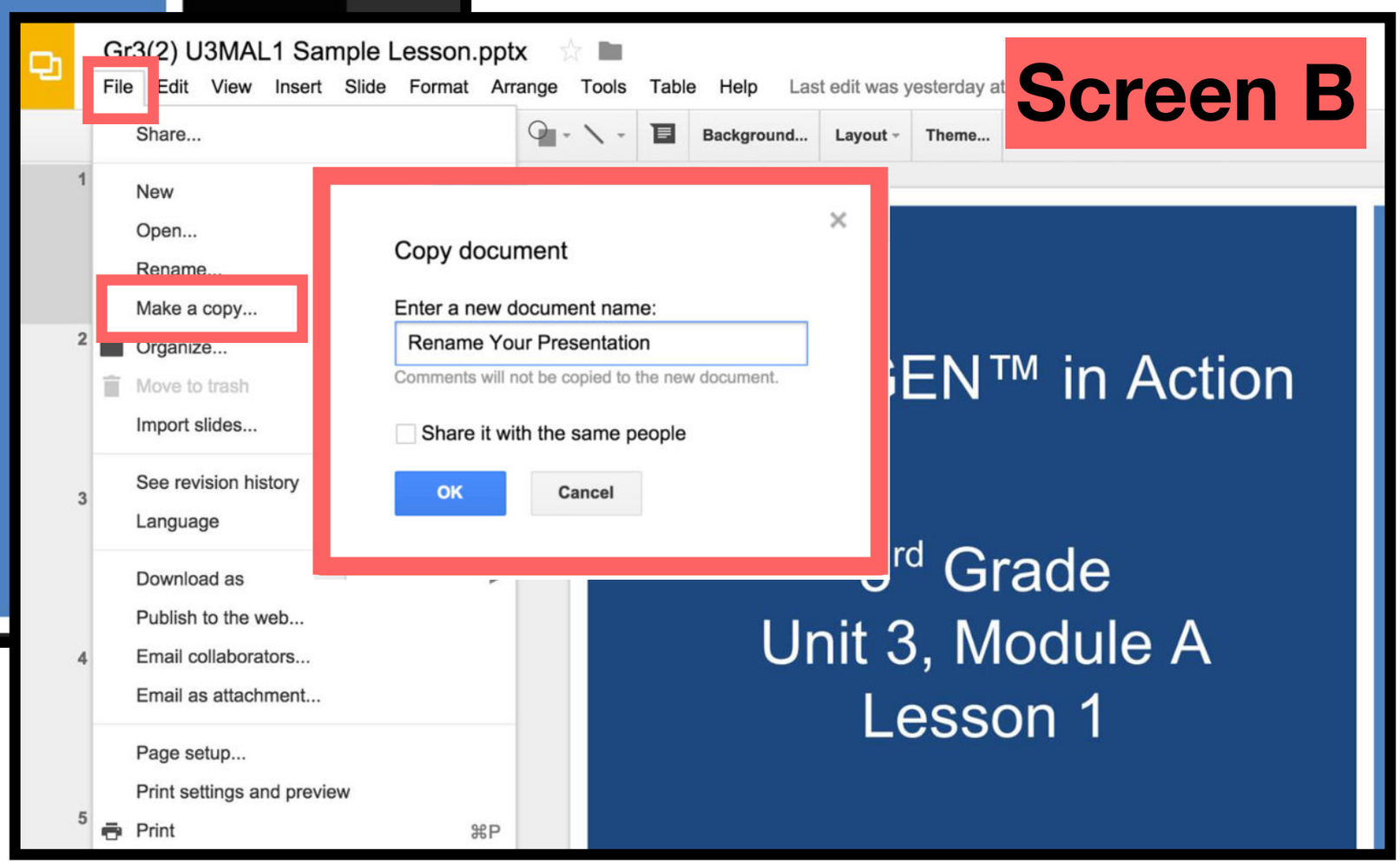
Directions for customizing presentations are available on the next slide.

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

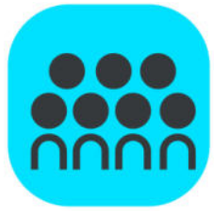
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

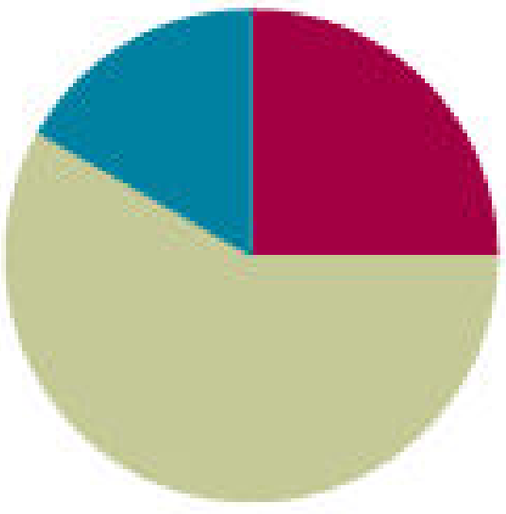
Small Group Time

Lesson 5

Objective: Compare and classify other polygons.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Concept Development	(35 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can compare and classify other polygons.

Fluency Practice

Multiply by 5 (8 min.)

5 × 5 = _____

Let’s skip-count up by fives.

5, 10, 15, 20, 25

3 x 5 = ___

Skip count by fives again.

5, 10, 15

Skip count down from 25 to check your answer

Fluency Practice

Multiply by 5 (8 min.)

4 × 5 = ____

Let’s skip-count up by fives.

5, 10, 15, 20

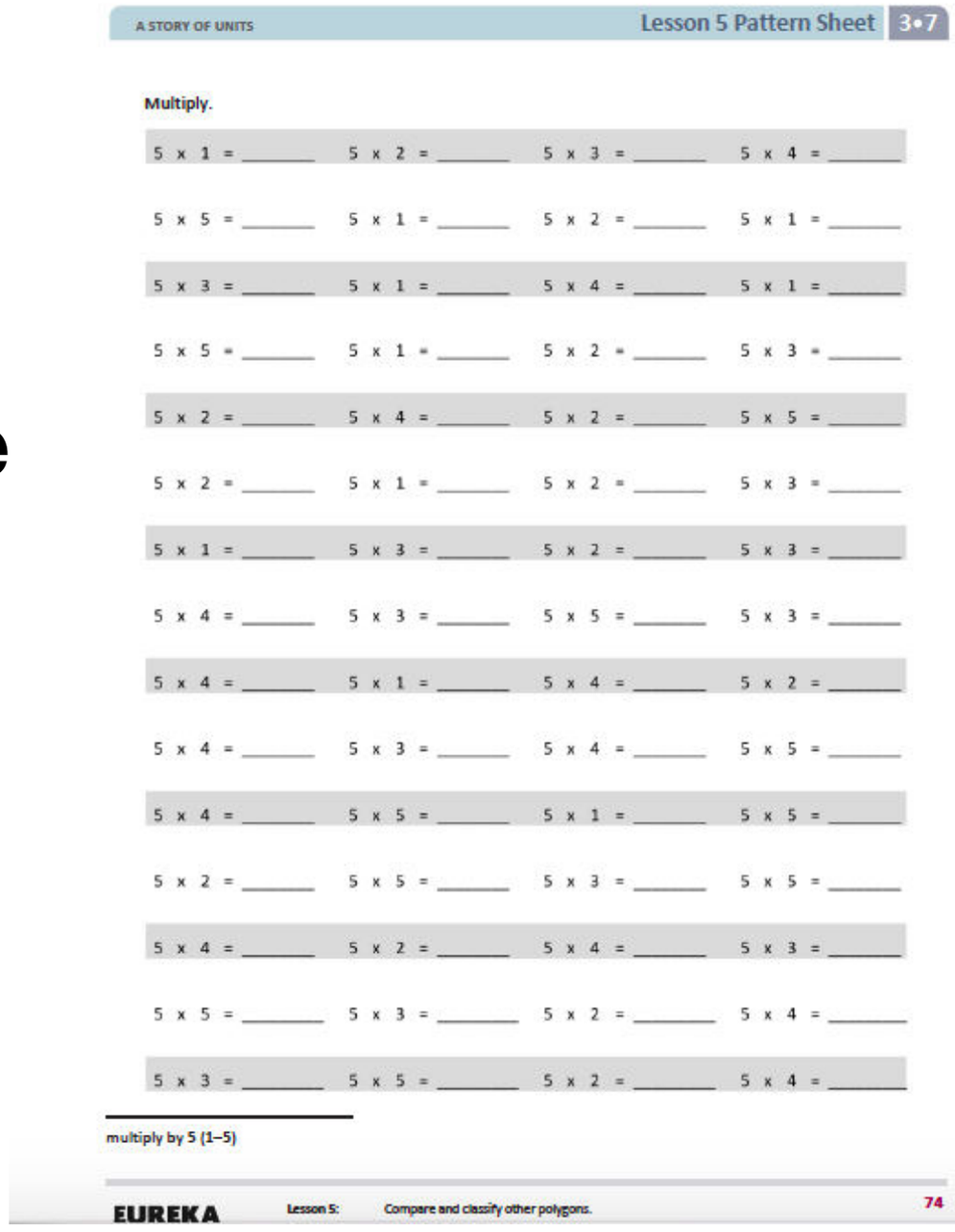
Skip count down by fives again starting at 25.

20, 15

Fluency Practice

Multiply by 5 (8 minutes)

Let’s practice multiplying by 5. Be sure to work left to right across the page.



A STORY OF UNITS — Lesson 5 Pattern Sheet — 3•7

Multiply.

5 x 1 = _____	5 x 2 = _____	5 x 3 = _____	5 x 4 = _____
5 x 5 = _____	5 x 1 = _____	5 x 2 = _____	5 x 1 = _____
5 x 3 = _____	5 x 1 = _____	5 x 4 = _____	5 x 1 = _____
5 x 5 = _____	5 x 1 = _____	5 x 2 = _____	5 x 3 = _____
5 x 2 = _____	5 x 4 = _____	5 x 2 = _____	5 x 5 = _____
5 x 2 = _____	5 x 1 = _____	5 x 2 = _____	5 x 3 = _____
5 x 1 = _____	5 x 3 = _____	5 x 2 = _____	5 x 3 = _____
5 x 4 = _____	5 x 3 = _____	5 x 5 = _____	5 x 3 = _____
5 x 4 = _____	5 x 1 = _____	5 x 4 = _____	5 x 2 = _____
5 x 4 = _____	5 x 3 = _____	5 x 4 = _____	5 x 5 = _____
5 x 4 = _____	5 x 5 = _____	5 x 1 = _____	5 x 5 = _____
5 x 2 = _____	5 x 5 = _____	5 x 3 = _____	5 x 5 = _____
5 x 4 = _____	5 x 2 = _____	5 x 4 = _____	5 x 3 = _____
5 x 5 = _____	5 x 3 = _____	5 x 2 = _____	5 x 4 = _____
5 x 3 = _____	5 x 5 = _____	5 x 2 = _____	5 x 4 = _____

multiply by 5 (1–5)

EUREKA Lesson 5: Compare and classify other polygons. 74

Fluency Practice

Equivalent Counting with Units of 6 (4 minutes)

Count to 10 as I write. Please do not count faster than I can write.

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

Count to 10 sixes.

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

Count by sixes to 60

Alternate between units of 6 and the number

Fluency Practice

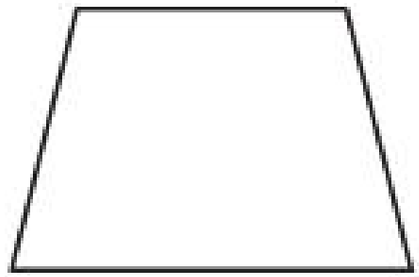
Equivalent Counting with Units of 6 (4 minutes)

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

Fluency Practice

Classify the Polygon (4 minutes)

How many sides does this polygon have?



What do we call a polygon with four sides?

How many sets of parallel lines does this quadrilateral have?

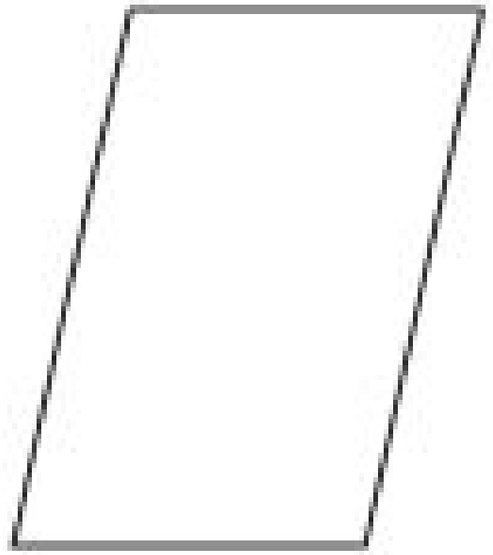
What do we call quadrilaterals that have AT LEAST one set of parallel lines?

Fluency Practice

Classify the Polygon (4 minutes)

Is this polygon a quadrilateral? Why?

How many right angles does this quadrilateral have?



Is this quadrilateral a trapezoid? Why?

How many sets of parallel sides does it have?

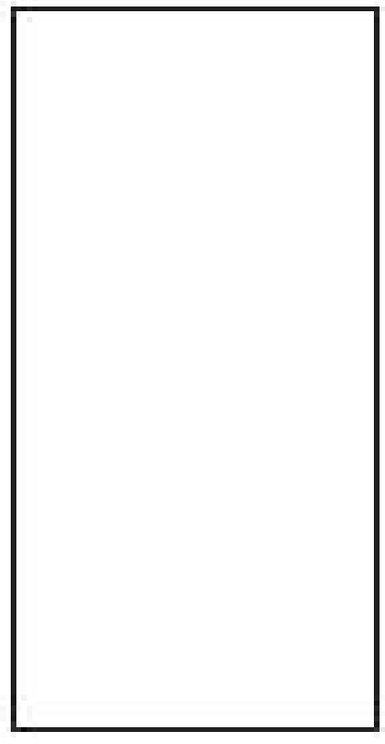
What do we call a quadrilaterals that have two sets of parallel sides?

Fluency Practice

Classify the Polygon (4 minutes)

Is this polygon a quadrilateral? Why?

How many right angles does this quadrilateral have?



Is this quadrilateral a trapezoid? Why?

Is this trapezoid also a parallelogram? Why?

Is this parallelogram also a rectangle? Why?

What do we call a quadrilaterals that have two sets of parallel sides?

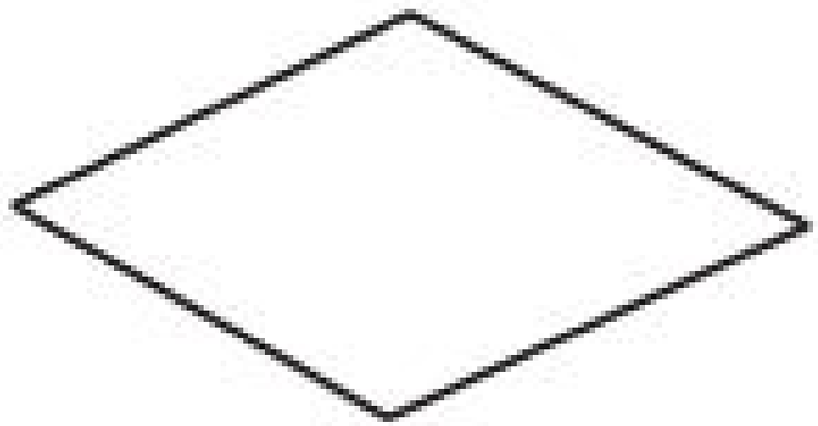
Fluency Practice

Classify the Polygon (4 minutes)

Is this polygon a quadrilateral? Why?

How many right angles does this quadrilateral have?

Is this quadrilateral a trapezoid? Why?

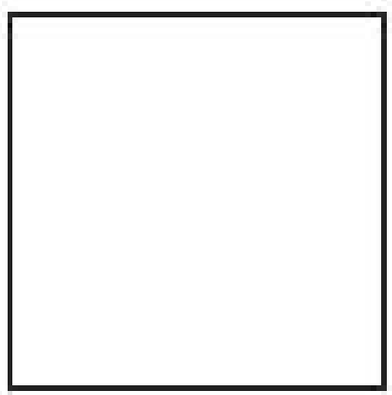


Is this trapezoid also a parallelogram? Why?

Is this parallelogram also a rectangle? Why?

What do we call a parallelogram with 4 equal-length sides?

What is a rhombus with 4 right angles called?

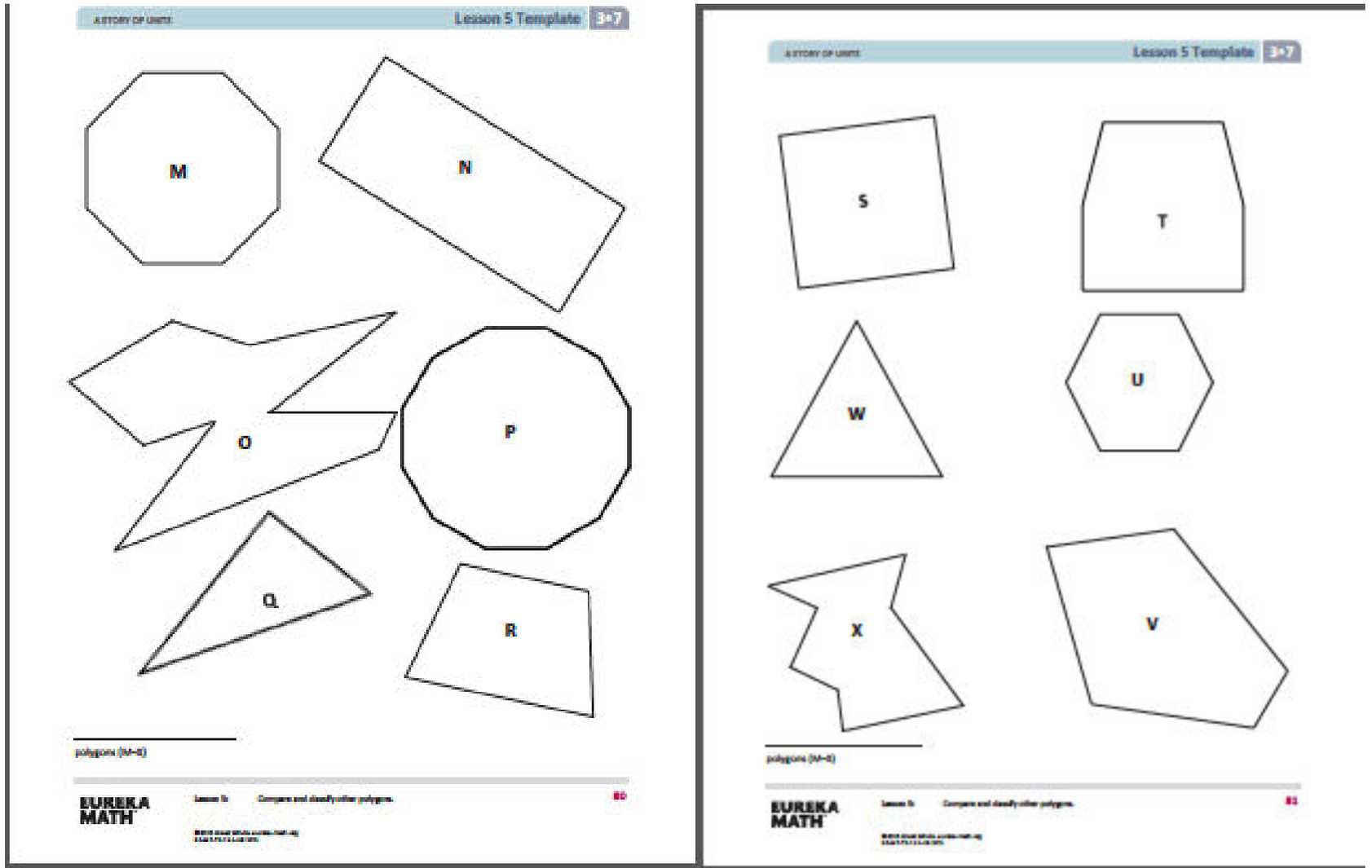


How else can we classify a square?

Concept Development

Problem 1: Group polygons by attributes.

Look at Polygons M-X. Compare them with yesterday's polygons. What do you notice?



Concept Development

Problem 1: Group polygons by attributes.

Take out your right angle tool and ruler.

Open your Workbook to the Lesson 5 Problem Set. What tool do we need to group polygons with all equal sides?

Talk to your partner about which unit will be most precise: inches, half inches, quarter inches or centimeters

Work with your partner to measure the sides of all your polygons to the nearest quarter inch. Label the inside side lengths. Cut out Polygons M-X

Concept Development

Group into categories of *all sides are equal* and *not all sides are equal*.

All sides are equal	*Not all sides are equal*

Complete the first two sections of your chart

Concept Development

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

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

Complete the rest of the chart.

Concept Development

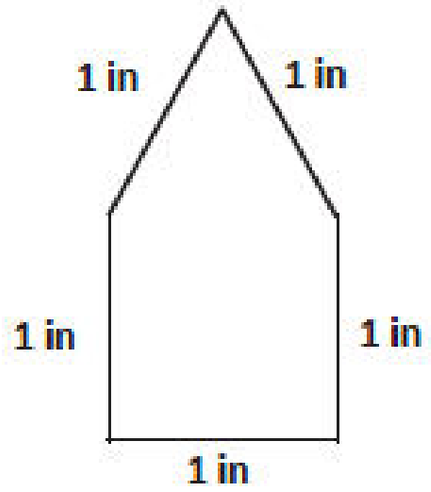
Look at Polygon S. What do you notice about the side lengths?

What about the angles?

A polygon with all sides equal and all angles equal is called a **regular polygon**.

How many sides does this polygon have? What do we call it?

Is this a regular pentagon?



Concept Development

Problem 2: Compare Polygons

Count each polygon's sides. Write the number of sides under the polygon's letter.

Group the polygons with the same number of sides.

Compare the polygons in each group. Are they the same type of polygon?

Concept Development

Problem 2: Compare Polygons

Now, spread out your polygons.

I'll show and say an attribute. You hold up a polygon that fits that attribute.

Show a polygon with *All* equal sides

Show a polygon that has *exactly* one right angle

Show a polygon that has four equal sides
Show a polygon that has only one set of parallel lines
Show a polygon that has exactly three sets of parallel lines

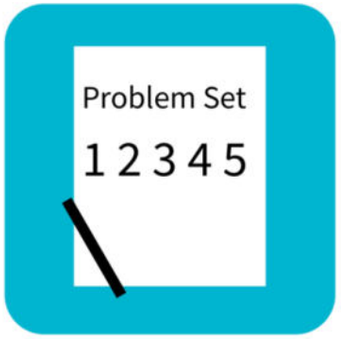
Problem Set
1 2 3 4 5

Problem Set (P 75)

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:	



Problem Set

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.

Debrief

Look at Problem 3. Which attributes are the same and different?

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?

Exit Ticket (3 minutes)

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?