

## Lesson 1

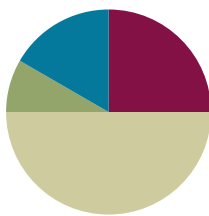
**Objective:** Classify shapes based on defining attributes using examples, variants, and non-examples.

**Related Topics:**

[More Lesson Plans for Grade 1 Common Core Math](#)

### Suggested Lesson Structure

■ Fluency Practice	(15 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(30 minutes)
■ Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>



### Fluency Practice (15 minutes)

- Grade 1 Core Fluency Sprint **1.OA.6** (10 minutes)
- Make it Equal: Addition Expressions **1.OA.7** (5 minutes)

### Grade 1 Core Fluency Sprint (10 minutes)

Materials: (S) Core Fluency Sprint

Note: For the remainder of the year, a portion of each lesson will be devoted to either Core Fluency Sprints or Core Fluency Practice Sets. When Sprints are suggested, choose a Core Fluency Sprint that meets students' needs. All five Core Fluency Sprints are provided at the end of this lesson and described below for easy reference. Prepare class sets or save the masters for later use as they will not be included in future lessons. With each Sprint, notice how many problems the class averages. Discuss and celebrate improvement as students progress toward Grade 1's required fluency.

Core Fluency Sprint List:

- Core Addition Sprint (Targets core addition and missing addends.)
- Core Addition Sprint 2 (Targets the most challenging addition within 10.)
- Core Subtraction Sprint (Targets core subtraction.)
- Core Fluency Sprint: Totals of 5, 6, and 7 (Develops understanding of the relationship between addition and subtraction.)
- Core Fluency Sprint: Totals of 8, 9, and 10 (Develops understanding of the relationship between addition and subtraction.)

### Make it Equal: Addition Expressions (5 minutes)

Materials: (S) Numeral cards (from G1–M1–Lesson 36), 1 “=” card, 2 “+” cards

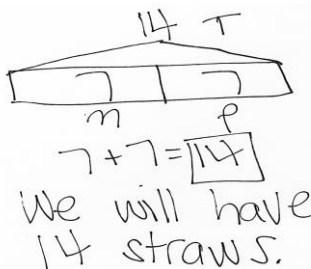
Note: This activity builds fluency with Grade 1’s core addition facts and promotes an understanding of equality.

Assign students partners of equal ability. Students arrange numeral cards from 0 to 10, including the extra 5, and place the “=” card between them. Write four numbers on the board (e.g., 9, 5, 5, 1). Partners take the numeral cards that match the numbers written to make two equivalent expressions (e.g.,  $5 + 5 = 9 + 1$ ).

Suggested sequences: 5, 5, 9, 1; 0, 1, 9, 10; 10, 8, 2, 0; 8, 7, 3, 2; 5, 3, 5, 7; 3, 6, 7, 4; 2, 4, 6, 8, etc.

### Application Problem (5 minutes)

Today, everyone will get 7 straw pieces to use in our lesson. Later, you will use your pieces and your partner’s pieces together. How many straw pieces will you have to use when you and your partner put them together?



#### NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Today, students will be introduced to their Straw Kit that will be used throughout Module 5. Since students have not worked with the straw pieces, show the class what the straw pieces look like before they begin the Application Problem.

Note: This is a *put together with total unknown* problem type. Some students may have difficulty determining the second addend since it is not directly stated in the problem. When working with students who are having difficulty, ask these prompting questions: *Can you draw something? What can you draw? What does your drawing show you?* During the Debrief, invite students to explain how they solved the problem.

### Concept Development (30 minutes)

Materials: (T) Chart paper, document camera, square corner tester template (S) Blank paper, straw kit (see note), ruler

Note: Prepare the square corner tester by cutting out the L shape from the template. Prepare a straw kit for each student. Coffee straws are recommended because they do not roll as easily and they fit more neatly on student desks; however, any available straws can be used. Each student kit contains three sizes of straw pieces, created using four straws: 2 full-length straws, 3 half-length straws, and 2 quarter-length straws. The

ruler will be used for drawing straight lines. Also, check shape posters and any shape resources you may use to be sure they show the shapes and names accurately.

Have students sit at their desk or tables with their materials.

T: Today, we will be making all kinds of shapes with these straws. Take two minutes to explore the pieces and see what you can make. Keep the straws flat on your desk.

S: (While students explore and create shapes, circulate and notice how they engage with the materials. Do not discuss shape names with students at this time, but rather focus on the number of straight sides, number of corners, and the length of the sides. During tomorrow’s lesson, names will be added to the sets of attributes.)

T: (Project open and closed shape images.) Some of you created designs that are open, like this (point to design labeled *Open Shapes*), and some of you created designs that are closed, like this (point to design labeled *Closed Shapes*). Think back to what you learned in kindergarten. Can you remember what the difference is between an open shape (point to the image) and a closed shape (point to the image)?

S: A closed shape is one that has no opening to get out if you were inside the lines. → There’s an inside and an outside for a closed shape. → Both ends of every straw touch another straw.

T: Who has an example of an open shape to show us?

S: (Share.)

T: Who has an example of a closed shape to show us?

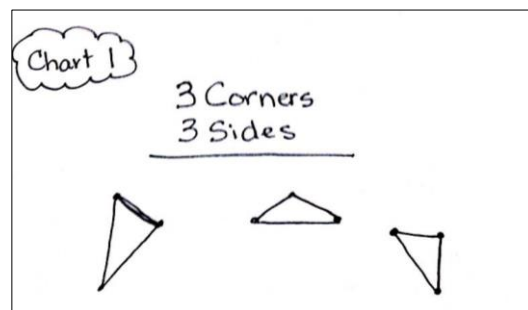
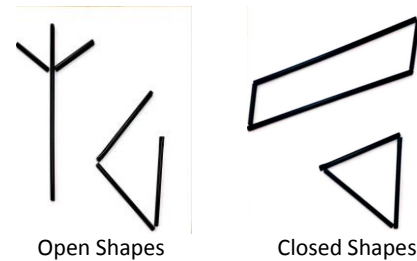
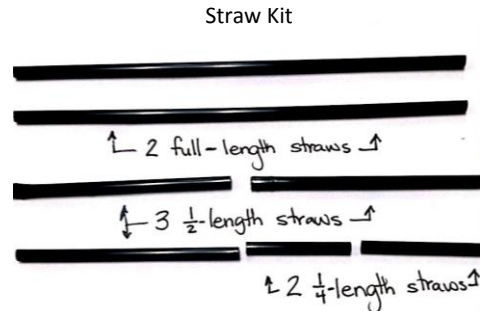
S: (Share.)

T: Today, we’ll be making closed shapes, so try to make sure you keep your straws touching at the ends when we make our shapes. If you have an open shape right now, make a new shape so that you have a closed one.

T: (Look for a student who created a three-sided shape, and place the configuration under the document camera.) Let’s look at this shape. How would you describe it?

S: It has three straight sides. → The straws come together at three points. → It has three corners. → The sides are different lengths. (Or, the sides are the same length, depending on the shape displayed.)

T: (Write *3 Straight* and *3 Corners* at the top of the chart paper.) Use your straws to create this exact same shape on top of your blank paper.



S: (Create the shape with straws. As students do this, ask questions to support attention to the length of the sides so that students are creating the same exact congruent shape.)

T: Let's record the shape. Draw a dot at the corners where each set of straws meet. Remember a corner is where two sides meet.

T/S: (Draw dots.)

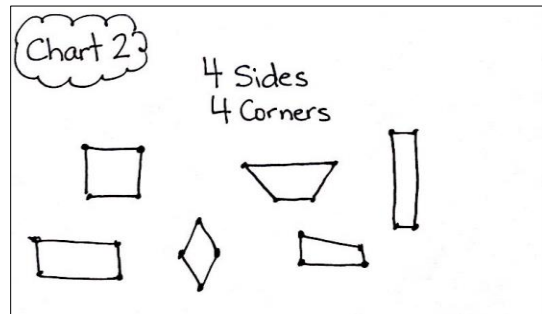
T: (Demonstrate as you describe the process.) Now, move your straws away. Line up your ruler so that two dots are touching the side of the ruler. We can touch one dot with our pencil and draw a very straight line to the next dot. You try it.

S: (Draw straight line connecting the dots.)

T: Great job! Let's do the same thing to draw all three sides of our shape.

S: (Complete drawing.)

T: (Put the shape back under the document camera.) Does anyone else have a shape that is made with three straight sides and three corners?



Repeat the process at least four times, to create and record various combinations of three straight sides and three corners.

T: (Point to the shapes on the chart.) All of these shapes have two **attributes**, or characteristics, in common. What are they?

S: All of the shapes have three straight sides and three corners.

T: Great! Let's make a new chart with shapes that have a different attribute. Let's make different shapes that all have four straight sides and four corners. Turn over your paper so you can record the shapes on the other side.

Write *4 Corners* and *4 Sides* at the top of a new piece of chart paper. Repeat the process from above at least four times, being sure to include shapes such as two rectangles of varied lengths, a trapezoid, and at least one quadrilateral that is not easily named.

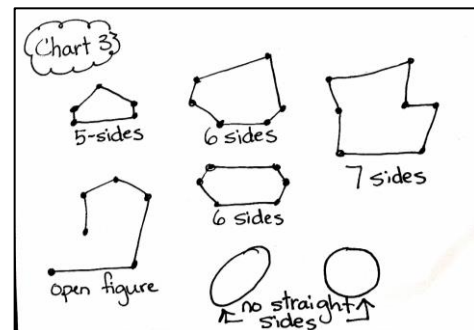
T: Now, combine your straws with your partner. Can you come up with other shapes with four corners and four straight sides that we did not record on our list?

S: (Work with partner and create shapes such as squares and rhombuses.)

Continue the process of adding these shapes to the chart and having students record the shapes.

**NOTES ON MULTIPLE MEANS OF REPRESENTATION:**

Some students find visual discrimination challenging, particularly when the attributes are at more refined levels. Provide encouragement to support students' perseverance. Have students touch the corners or line up the straws as methods to concretely confirm the attributes discussed.



MP.1

- T: Let's look at Chart 2. All of these shapes have four straight sides and four corners. Some of the corners are a special kind, called a square corner. They form this shape. (Hold up and trace the edge of the square corner tester.) Let's use the square corner tester to find square corners on these four-sided, four-cornered shapes. (Use the tester, placing a square in the corner of each square corner.)
- T: Think back to the shapes you made earlier. What closed shapes did you make that would *not* fit with one of our charts? We'll make a separate chart for these.
- S: (Share shapes with five or more straight sides. As students share, create a final chart. Draw each shape and write its specific attributes next to it.)
- T: This paper shows shapes with five straight sides, six straight sides, and even seven straight sides. I want to draw a shape on here that has no straight sides. Who would like to add a shape on here that has no straight sides?
- S: (Adds an oval or circle to the chart.)

**Problem Set (10 minutes)**

Students should do their personal best to complete the Problem Set within the allotted 10 minutes.

For some classes, it may be appropriate to modify the assignment by specifying which problems students should work on first. With this option, let the careful sequencing of the Problem Set guide your selections so that problems continue to be scaffolded. Balance word problems with other problem types to ensure a range of practice. Assign incomplete problems for homework or at another time during the day.

**Student Debrief (10 minutes)**

**Lesson Objective:** Classify shapes based on defining attributes using examples, variants, and non-examples.

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

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 1 Problem Set 1•5

Name Maria Date \_\_\_\_\_

1. Circle the shapes that have 5 straight sides.

2. Circle the shapes that have no straight sides.

3. Circle the shapes where every corner is a square corner.

4.

a. Draw a shape that has 3 straight sides.

b. Draw another shape with 3 straight sides that is different from 4a and from the ones above.

COMMON CORE Lesson 1: Classify shapes based on defining attributes using examples, variants, and non-examples. engage<sup>ny</sup> 5.A.17

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 1 Problem Set 1•5

5. What attributes, or characteristics, are the same for all of the shapes in Group A?

GROUP A

They all have 3 sides.

They all have 3 corners.

6. Circle the shape that best fits with Group A.

7. Draw 2 more shapes that would fit Group A.

8. Draw 1 shape that would not fit in Group A.

COMMON CORE Lesson 1: Classify shapes based on defining attributes using examples, variants, and non-examples. engage<sup>ny</sup> 5.A.18

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.

You may choose to use any combination of the questions below to lead the discussion.

- Look at Problem 1. Which shapes did you choose? Which shapes did not have the attribute of having five straight sides?
- Look at Problem 4. Compare your shapes to those on our chart. Which shapes look exactly the same? Did anyone draw a shape that is not already represented on our chart?
- Look at Problem 5. Which attributes, or characteristics, are the same for all of the shapes? Which attributes are different among the shapes in Group A?
- What does it mean to share an **attribute** of a shape?
- Look at your Application Problem and share your solution with a partner. How did your straws help you create different shapes today? Can you make a shape with four straight sides and only three corners? What would that look like? (Students may put two sides next to one another, essentially making a longer line out of two of the four straws. If this is done, let students know this can be considered one side that uses two straws.)

### Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help you assess the students' understanding of the concepts that were presented in the lesson today and plan more effectively for future lessons. You may read the questions aloud to the students.

A

Number correct:



Name \_\_\_\_\_

Date \_\_\_\_\_

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

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



**B**

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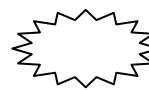
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2	$5 + 2 = \underline{\quad}$	17	$\underline{\quad} + 4 = 6$
3	$5 + 3 = \underline{\quad}$	18	$6 = \underline{\quad} + 4$
4	$4 + 1 = \underline{\quad}$	19	$3 + 4 = \underline{\quad}$
5	$4 + 2 = \underline{\quad}$	20	$\underline{\quad} + 3 = 7$
6	$4 + 3 = \underline{\quad}$	21	$7 = \underline{\quad} + 4$
7	$1 + 3 = \underline{\quad}$	22	$4 + 5 = \underline{\quad}$
8	$2 + 3 = \underline{\quad}$	23	$\underline{\quad} + 4 = 9$
9	$3 + 3 = \underline{\quad}$	24	$9 = \underline{\quad} + 5$
10	$3 + \underline{\quad} = 6$	25	$2 + 6 = \underline{\quad}$
11	$\underline{\quad} + 3 = 6$	26	$\underline{\quad} + 6 = 9$
12	$5 + 2 = \underline{\quad}$	27	$9 = \underline{\quad} + 2$
13	$5 + 3 = \underline{\quad}$	28	$3 + 3 = \underline{\quad} + 4$
14	$5 + \underline{\quad} = 8$	29	$3 + 4 = \underline{\quad} + 5$
15	$\underline{\quad} + 3 = 8$	30	$\underline{\quad} + 6 = 2 + 7$



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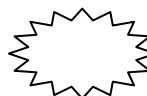
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\*Write the unknown number. Pay attention to the equal sign.

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2	$6 + 2 = \underline{\quad}$	17	$\underline{\quad} = 4 + 5$
3	$7 + 2 = \underline{\quad}$	18	$6 + 3 = \underline{\quad}$
4	$4 + 3 = \underline{\quad}$	19	$3 + 6 = \underline{\quad}$
5	$5 + 3 = \underline{\quad}$	20	$\underline{\quad} = 2 + 6$
6	$6 + 3 = \underline{\quad}$	21	$2 + 7 = \underline{\quad}$
7	$\underline{\quad} = 6 + 2$	22	$\underline{\quad} = 3 + 4$
8	$\underline{\quad} = 2 + 6$	23	$3 + 6 = \underline{\quad}$
9	$\underline{\quad} = 7 + 2$	24	$\underline{\quad} = 4 + 5$
10	$\underline{\quad} = 2 + 7$	25	$3 + 4 = \underline{\quad}$
11	$\underline{\quad} = 4 + 3$	26	$13 + 4 = \underline{\quad}$
12	$\underline{\quad} = 3 + 4$	27	$3 + 14 = \underline{\quad}$
13	$\underline{\quad} = 5 + 3$	28	$3 + 6 = \underline{\quad}$
14	$\underline{\quad} = 3 + 5$	29	$13 + \underline{\quad} = 19$
15	$\underline{\quad} = 3 + 4$	30	$19 = \underline{\quad} + 16$

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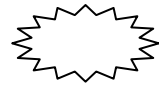
Name \_\_\_\_\_

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\*Write the unknown number. Pay attention to the equal sign.

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

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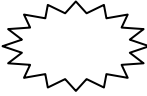
**A**

Name \_\_\_\_\_

Date \_\_\_\_\_

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

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2	$6 - 2 = \underline{\quad}$	17	$8 - 6 = \underline{\quad}$
3	$6 - 3 = \underline{\quad}$	18	$7 - 3 = \underline{\quad}$
4	$10 - 1 = \underline{\quad}$	19	$7 - 4 = \underline{\quad}$
5	$10 - 2 = \underline{\quad}$	20	$8 - 4 = \underline{\quad}$
6	$10 - 3 = \underline{\quad}$	21	$9 - 4 = \underline{\quad}$
7	$7 - 2 = \underline{\quad}$	22	$9 - 5 = \underline{\quad}$
8	$8 - 2 = \underline{\quad}$	23	$9 - 6 = \underline{\quad}$
9	$9 - 2 = \underline{\quad}$	24	$9 - \underline{\quad} = 6$
10	$7 - 3 = \underline{\quad}$	25	$9 - \underline{\quad} = 2$
11	$8 - 3 = \underline{\quad}$	26	$2 = 8 - \underline{\quad}$
12	$10 - 3 = \underline{\quad}$	27	$2 = 9 - \underline{\quad}$
13	$10 - 4 = \underline{\quad}$	28	$10 - 7 = 9 - \underline{\quad}$
14	$9 - 4 = \underline{\quad}$	29	$9 - 5 = \underline{\quad} - 3$
15	$8 - 4 = \underline{\quad}$	30	$\underline{\quad} - 6 = 9 - 7$

Number correct: 

**B**  
Name \_\_\_\_\_

Date \_\_\_\_\_

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

1	$5 - 1 = \underline{\quad}$	16	$6 - 2 = \underline{\quad}$
2	$5 - 2 = \underline{\quad}$	17	$6 - 4 = \underline{\quad}$
3	$5 - 3 = \underline{\quad}$	18	$8 - 3 = \underline{\quad}$
4	$10 - 1 = \underline{\quad}$	19	$8 - 5 = \underline{\quad}$
5	$10 - 2 = \underline{\quad}$	20	$8 - 6 = \underline{\quad}$
6	$10 - 3 = \underline{\quad}$	21	$9 - 3 = \underline{\quad}$
7	$6 - 2 = \underline{\quad}$	22	$9 - 6 = \underline{\quad}$
8	$7 - 2 = \underline{\quad}$	23	$9 - 7 = \underline{\quad}$
9	$8 - 2 = \underline{\quad}$	24	$9 - \underline{\quad} = 5$
10	$6 - 3 = \underline{\quad}$	25	$9 - \underline{\quad} = 4$
11	$7 - 3 = \underline{\quad}$	26	$4 = 8 - \underline{\quad}$
12	$8 - 3 = \underline{\quad}$	27	$4 = 9 - \underline{\quad}$
13	$5 - 4 = \underline{\quad}$	28	$10 - 8 = 9 - \underline{\quad}$
14	$6 - 4 = \underline{\quad}$	29	$8 - 6 = \underline{\quad} - 7$
15	$7 - 4 = \underline{\quad}$	30	$\underline{\quad} - 4 = 9 - 6$

A

Number correct:



Name \_\_\_\_\_

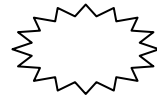
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\*Write the unknown number. Pay attention to the symbols.

1	$2 + 3 = \underline{\quad}$	16	$3 + 3 = \underline{\quad}$
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3	$5 - 3 = \underline{\quad}$	18	$6 = \underline{\quad} + 3$
4	$5 - 2 = \underline{\quad}$	19	$2 + 5 = \underline{\quad}$
5	$\underline{\quad} + 2 = 5$	20	$5 + \underline{\quad} = 7$
6	$1 + 5 = \underline{\quad}$	21	$7 - 2 = \underline{\quad}$
7	$1 + \underline{\quad} = 6$	22	$7 - 5 = \underline{\quad}$
8	$6 - 1 = \underline{\quad}$	23	$7 = \underline{\quad} + 5$
9	$6 - 5 = \underline{\quad}$	24	$3 + 4 = \underline{\quad}$
10	$\underline{\quad} + 5 = 6$	25	$4 + \underline{\quad} = 7$
11	$4 + 2 = \underline{\quad}$	26	$7 - 4 = \underline{\quad}$
12	$2 + \underline{\quad} = 6$	27	$7 = \underline{\quad} + 3$
13	$6 - 2 = \underline{\quad}$	28	$3 = 7 - \underline{\quad}$
14	$6 - 4 = \underline{\quad}$	29	$7 - 5 = \underline{\quad} - 4$
15	$\underline{\quad} + 4 = 6$	30	$\underline{\quad} - 3 = 7 - 4$

**B**

Number correct:



Name \_\_\_\_\_

Date \_\_\_\_\_

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

1	$1 + 4 = \underline{\quad}$	16	$3 + 3 = \underline{\quad}$
2	$4 + \underline{\quad} = 5$	17	$6 - 3 = \underline{\quad}$
3	$5 - 4 = \underline{\quad}$	18	$6 = \underline{\quad} + 3$
4	$5 - 1 = \underline{\quad}$	19	$2 + 4 = \underline{\quad}$
5	$\underline{\quad} + 1 = 5$	20	$4 + \underline{\quad} = 6$
6	$7 + 2 = \underline{\quad}$	21	$6 - 2 = \underline{\quad}$
7	$5 + \underline{\quad} = 7$	22	$6 - 4 = \underline{\quad}$
8	$7 - 2 = \underline{\quad}$	23	$6 = \underline{\quad} + 4$
9	$7 - 5 = \underline{\quad}$	24	$3 + 4 = \underline{\quad}$
10	$\underline{\quad} + 2 = 7$	25	$4 + \underline{\quad} = 7$
11	$1 + 5 = \underline{\quad}$	26	$7 - 4 = \underline{\quad}$
12	$1 + \underline{\quad} = 6$	27	$7 = \underline{\quad} + 4$
13	$6 - 1 = \underline{\quad}$	28	$4 = 7 - \underline{\quad}$
14	$6 - 5 = \underline{\quad}$	29	$6 - 4 = \underline{\quad} - 5$
15	$\underline{\quad} + 5 = 6$	30	$\underline{\quad} - 4 = 7 - 3$

**A**

Number correct:



Name \_\_\_\_\_

Date \_\_\_\_\_

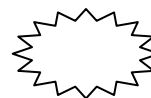
\*Write the unknown number. Pay attention to the symbols.

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3	$10 - 5 = \underline{\quad}$	18	$8 - 2 = \underline{\quad}$
4	$9 + 1 = \underline{\quad}$	19	$2 + 7 = \underline{\quad}$
5	$1 + \underline{\quad} = 10$	20	$9 = 7 + \underline{\quad}$
6	$10 - 1 = \underline{\quad}$	21	$9 - 7 = \underline{\quad}$
7	$10 - 9 = \underline{\quad}$	22	$8 = \underline{\quad} + 2$
8	$\underline{\quad} + 9 = 10$	23	$8 - 6 = \underline{\quad}$
9	$1 + 8 = \underline{\quad}$	24	$3 + 6 = \underline{\quad}$
10	$8 + \underline{\quad} = 9$	25	$9 = 6 + \underline{\quad}$
11	$9 - 1 = \underline{\quad}$	26	$9 - 6 = \underline{\quad}$
12	$9 - 8 = \underline{\quad}$	27	$9 = \underline{\quad} + 3$
13	$\underline{\quad} + 1 = 9$	28	$3 = 9 - \underline{\quad}$
14	$4 + 4 = \underline{\quad}$	29	$9 - 5 = \underline{\quad} - 6$
15	$8 - 4 = \underline{\quad}$	30	$\underline{\quad} - 7 = 8 - 6$



**B**

Number correct:



Name \_\_\_\_\_

Date \_\_\_\_\_

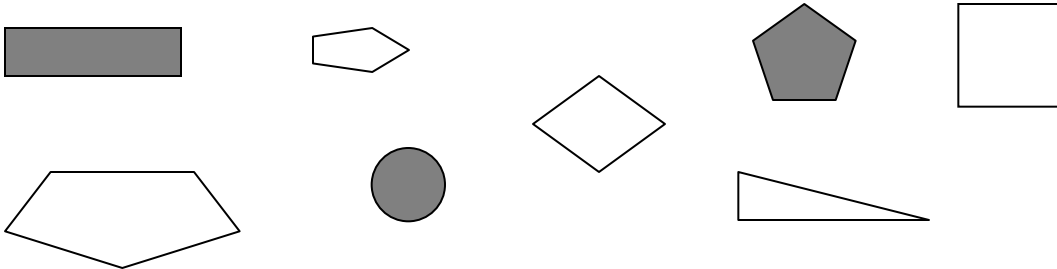
\*Write the unknown number. Pay attention to the symbols.

1	$9 + 1 = \underline{\quad}$	16	$3 + 5 = \underline{\quad}$
2	$1 + \underline{\quad} = 10$	17	$8 = 5 + \underline{\quad}$
3	$10 - 1 = \underline{\quad}$	18	$8 - 3 = \underline{\quad}$
4	$10 - 9 = \underline{\quad}$	19	$2 + 6 = \underline{\quad}$
5	$\underline{\quad} + 9 = 10$	20	$8 = 6 + \underline{\quad}$
6	$1 + 7 = \underline{\quad}$	21	$8 - 6 = \underline{\quad}$
7	$7 + \underline{\quad} = 8$	22	$2 + 7 = \underline{\quad}$
8	$8 - 1 = \underline{\quad}$	23	$9 = \underline{\quad} + 2$
9	$8 - 7 = \underline{\quad}$	24	$9 - 7 = \underline{\quad}$
10	$\underline{\quad} + 1 = 8$	25	$4 + 5 = \underline{\quad}$
11	$2 + 8 = \underline{\quad}$	26	$9 = 5 + \underline{\quad}$
12	$2 + \underline{\quad} = 10$	27	$9 - 5 = \underline{\quad}$
13	$10 - 2 = \underline{\quad}$	28	$5 = 9 - \underline{\quad}$
14	$10 - 8 = \underline{\quad}$	29	$9 - 6 = \underline{\quad} - 5$
15	$\underline{\quad} + 8 = 10$	30	$\underline{\quad} - 6 = 9 - 7$

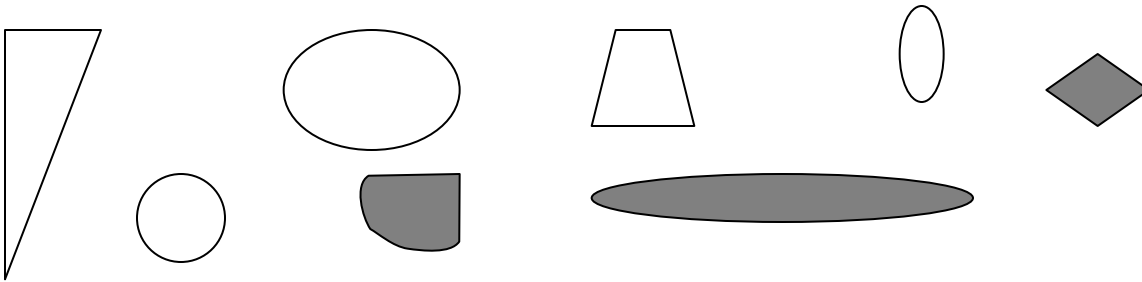
Name \_\_\_\_\_

Date \_\_\_\_\_

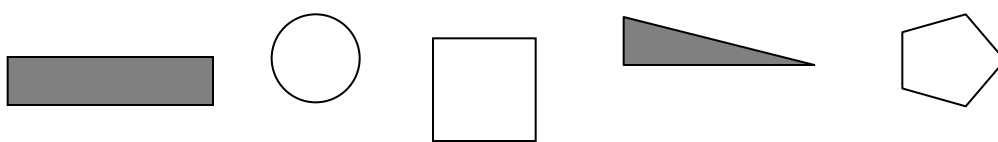
1. Circle the shapes that have 5 straight sides.



2. Circle the shapes that have no straight sides.



3. Circle the shapes where every corner is a square corner.



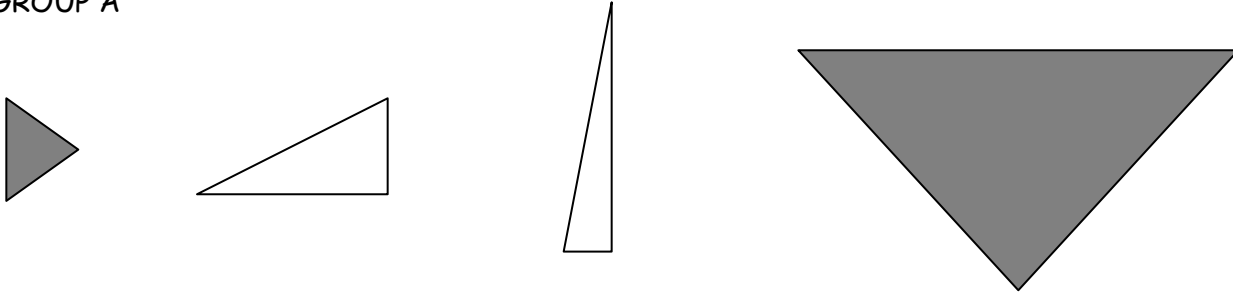
4.

a. Draw a shape that has 3 straight sides.

b. Draw another shape with 3 straight sides that is different from 4(a) and from the ones above.

5. Which attributes, or characteristics, are the same for all of the shapes in Group A?

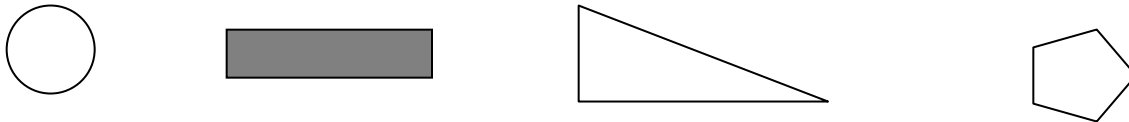
GROUP A



They all \_\_\_\_\_.

They all \_\_\_\_\_.

6. Circle the shape that best fits with Group A.

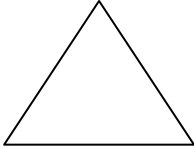
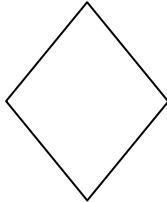
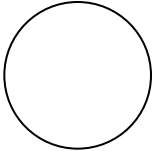


<p>7. Draw 2 more shapes that would fit Group A.</p>	<p>8. Draw 1 shape that would <b>not</b> fit in Group A.</p>
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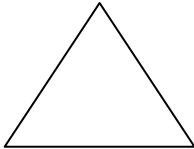
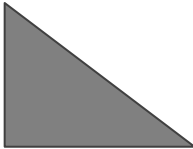

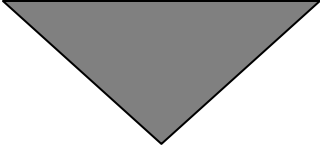
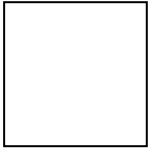

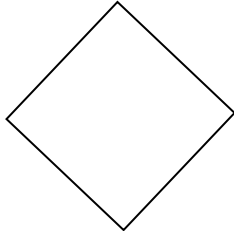

Name \_\_\_\_\_

Date \_\_\_\_\_

1. How many corners and straight sides does each of the shapes below have?

<p>a.</p>  <p>_____ corners _____ straight sides</p>	<p>b.</p>  <p>_____ corners _____ straight sides</p>	<p>c.</p>  <p>_____ corners _____ straight side</p>
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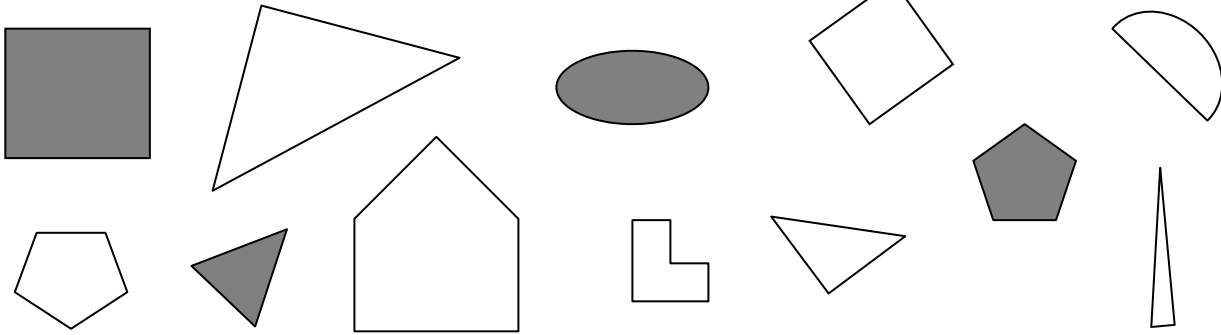
2. Look at the sides and corners of the shapes in each row. Cross off the shape that does not have the same number of straight sides or the same kind of corner.

<p>a.</p> 			
<p>b.</p> 			

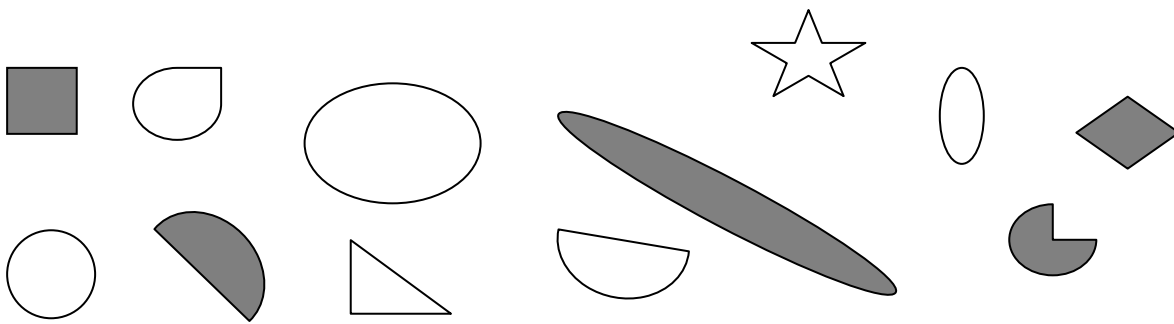
Name \_\_\_\_\_

Date \_\_\_\_\_

1. Circle the shapes that have 3 straight sides.



2. Circle the shapes that have no corners.



3. Circle the shapes that have only square corners.

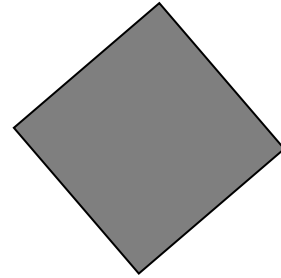
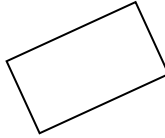
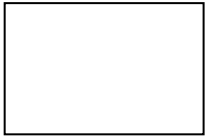


4. a. Draw a shape that has 4 straight sides.

b. Draw another shape with 4 straight sides that is different from 4(a) and from the ones above.

5. Which attributes, or characteristics, are the same for all of the shapes in Group A?

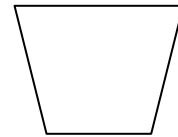
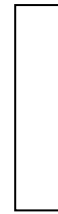
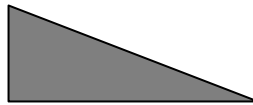
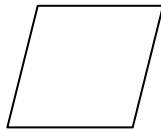
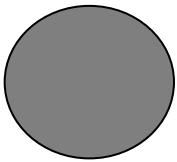
GROUP A



They all \_\_\_\_\_.

They all \_\_\_\_\_.

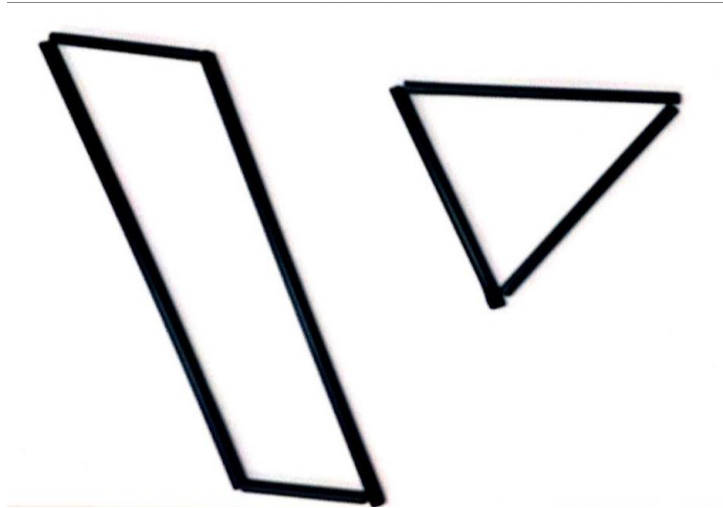
6. Circle the shape that best fits with Group A.



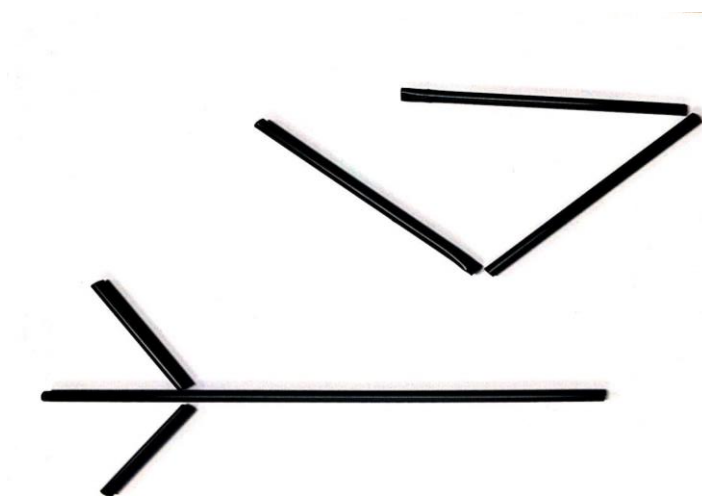
7. Draw 2 more shapes that would fit Group A.

8. Draw 1 shape that would not fit in Group A.

Closed  
Shapes



Open Shapes





## Square Corner Tester Template

Print on cardstock and cut out each of the two square corner testers.

