Just In Time Quick Check
Standard of Learning (SOL) 3.13

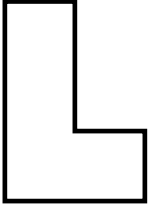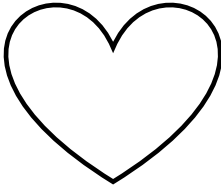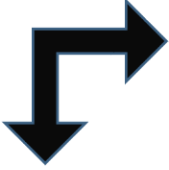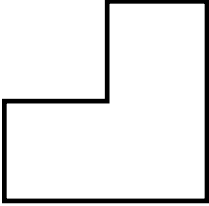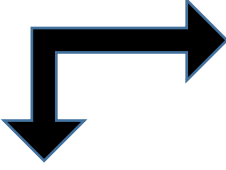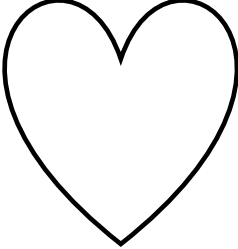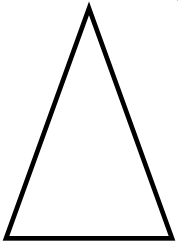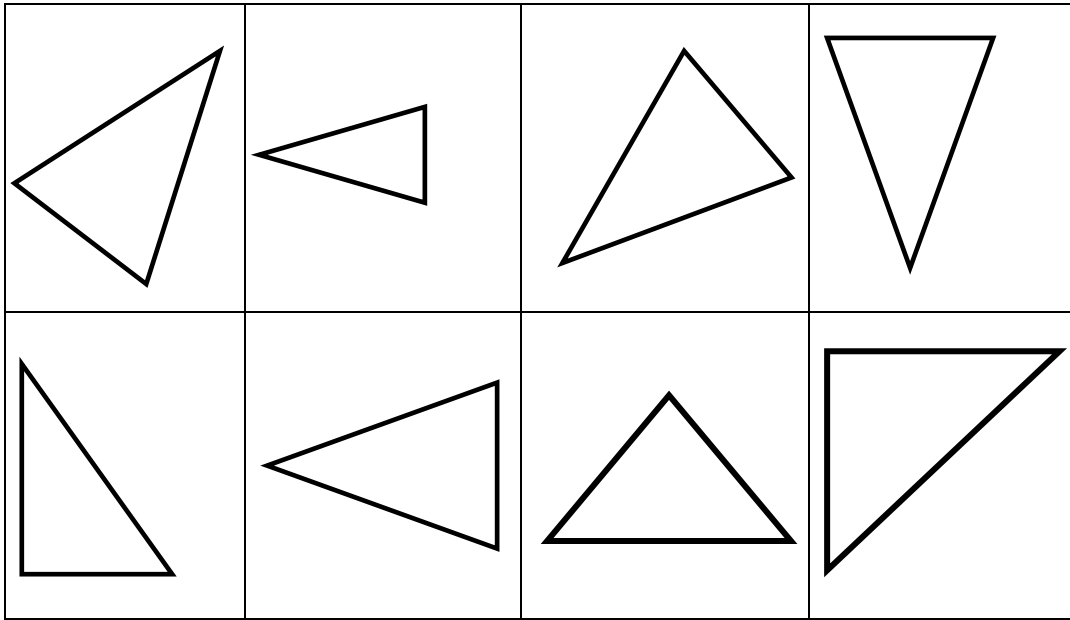| **Strand:** Measurement and Geometry |
|---|
| **Standard of Learning (SOL) 3.13**
The student will identify and describe congruent and noncongruent figures. |
| **Grade Level Skills:**
● Identify examples of congruent and noncongruent figures.
● Determine and explain why plane figures are congruent or noncongruent. |
| **Just in Time Quick Check** |
| **Just in Time Quick Check Teacher Notes** |
| **Supporting Resources:**
● VDOE Mathematics Instructional Plans (MIPS)
    ○ 3.13 – Fit to Be Congruent (Word) / PDF Version
● VDOE Word Wall Cards: Grade 3 (Word / PDF)
    ○ Congruent
    ○ Noncongruent |
| **Supporting and Prerequisite SOL:** 2.13, 1.11a, 1.11b |

SOL 3.13 - Just in Time Quick Check

1. Find two figures in the table that are congruent. Circle the congruent figures.

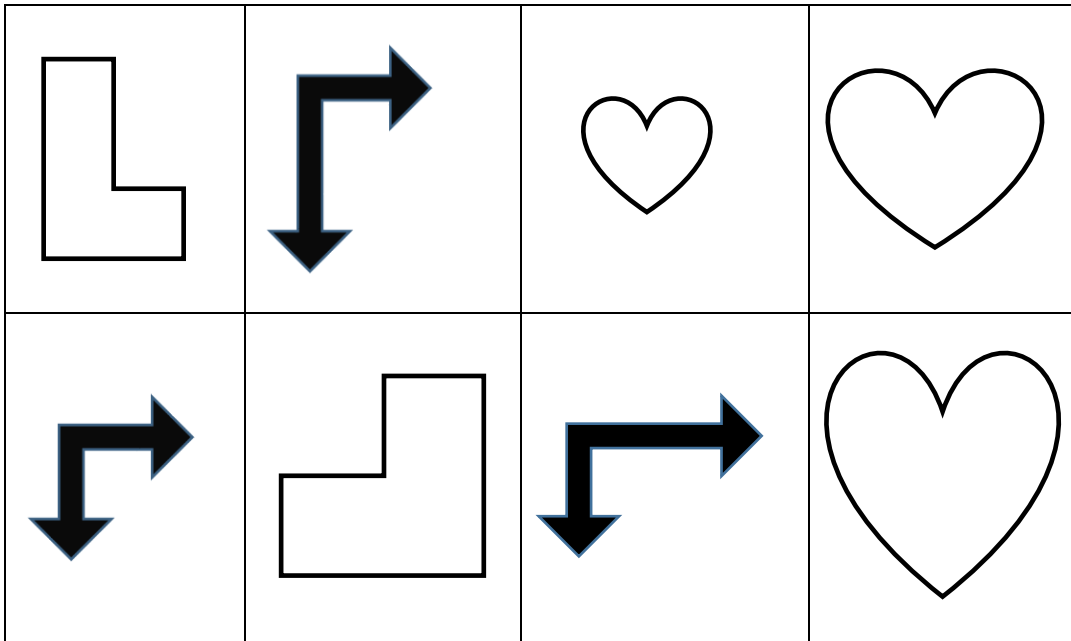2. Circle the figures in this table that are congruent to this triangle.

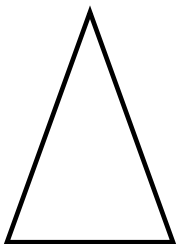3. Explain how you know if two figures are noncongruent.

1. Find two figures in the table that are congruent. Circle the congruent figures.
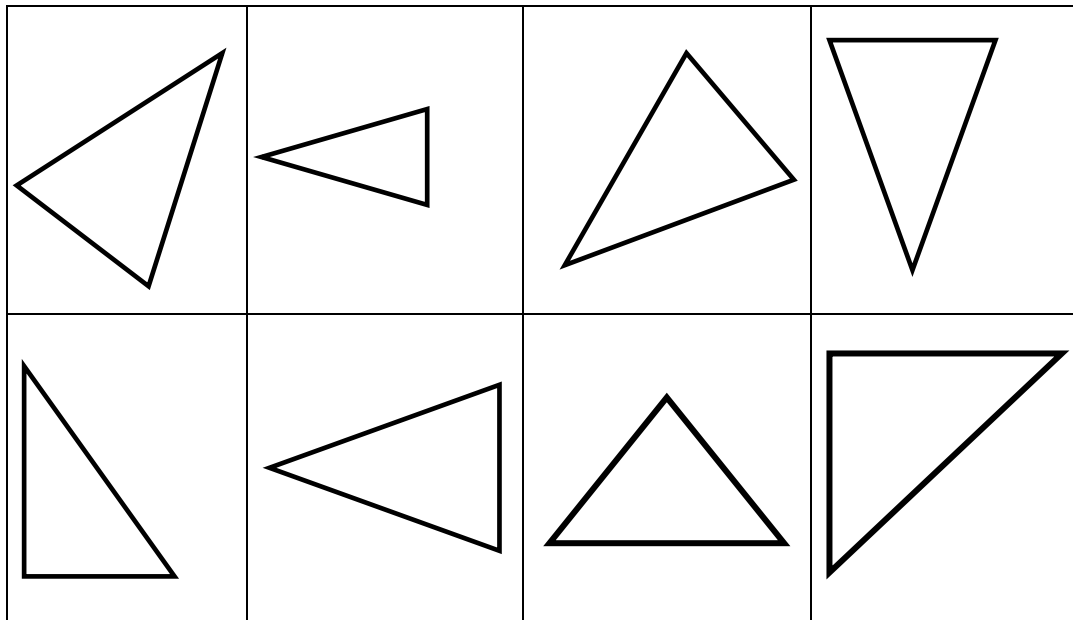

Students may identify the hearts that are different sizes as congruent. They may identify the hexagons as congruent because the angles are congruent, but the differences in side lengths makes these figures noncongruent. These students need additional opportunities to compare and contrast plane figures, identifying similarities and differences among those figures. Students may benefit from using direct comparison to determine congruence, either tracing or cutting out shapes and then putting them on top of each other to see if they are exactly the same shape and same size.

Exploration with concrete materials, such as Tangrams and pattern blocks, can help students develop understanding that figures keep their size and shape when their orientation changes. Experience tracing and using direct comparisons to determine congruence and noncongruence are important to build conceptual understanding.

2. Circle the figures in this table that are congruent to this triangle.

Students may identify all of the triangles as congruent because they are the "same shape" or because they "look the same." Students may only find congruence in figures that have the same orientation. These students would benefit from opportunities to explore with concrete shapes and directly compare those shapes by moving, flipping, and turning. Providing opportunities for students to consider, share, and discuss examples of congruence and noncongruence with their peers may be helpful.

Comparing physical models by covering, which may require rotating or flipping the models, allows students to develop the concept that figures are congruent if their sizes and shapes are exactly the same, regardless of spatial orientation.

3. Explain how you know if two figures are noncongruent.

Students' explanations may reveal that they are only considering size or shape but not both attributes when deciding if figures are noncongruent. These students need more experiences sorting sets of plane figures and discussing sorting results with peers. Materials that allow for covering or tracing help students develop understanding of the attributes to be considered when determining congruency (exact size and shape) and the characteristics of figures that do not impact congruency (for example, color or spatial orientation).