

Unit 1 (EOU) Study Guide

A straight edge and tracing paper are required for this study guide.

1. (Lesson 11, Act. 3) True or False

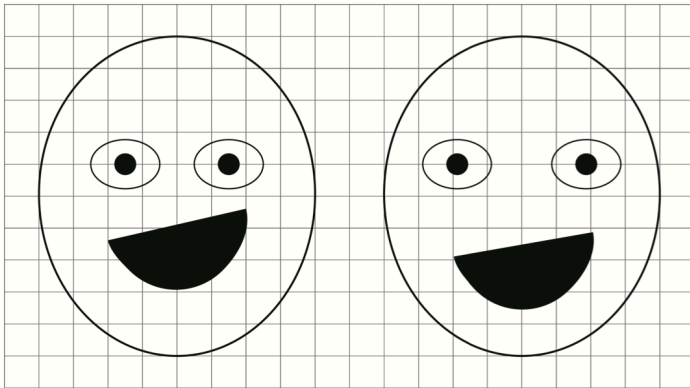
_____ Congruent rectangles have the same perimeter.

_____ Congruent rectangles have the same Area

_____ Rectangles with the same perimeter are always congruent.

_____ Rectangles with the same area are always congruent.

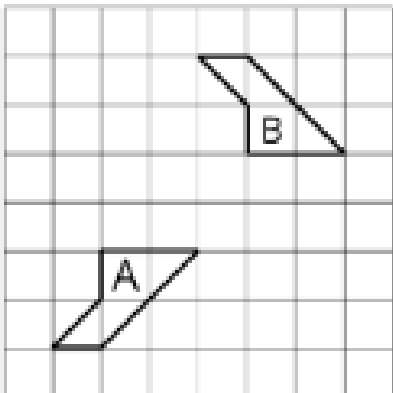
2. (Lesson 13, Act. 4) Here are two faces, a left face and a right face.



Select **all** the true statements.

- A. The left head shape is congruent to the right head shape.
- B. The left face is congruent to the right face.
- C. The right face is a translation of the left face.
- D. The right eye on the left face is congruent to the right eye on the right face.
- E. The mouth on the left face is in the same position of the mouth on the right face.

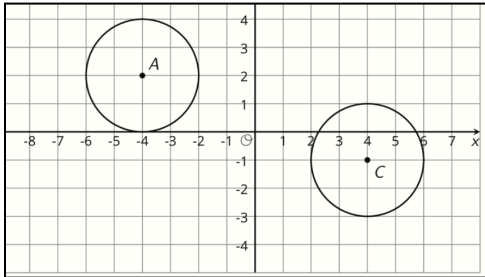
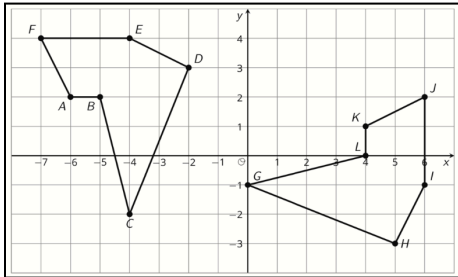
3. (Lesson 12) Describe a sequence of transformations that shows that Polygon A is congruent to Polygon B.



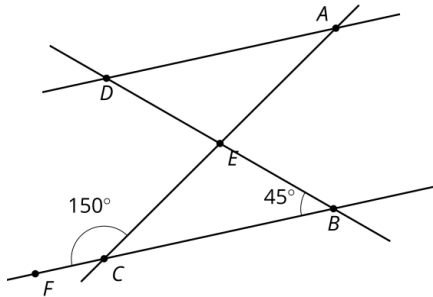
4. (Lesson 12, PP2) For each pair of shapes, decide whether or not the two shapes are congruent. Explain your reasoning.

a. First pair: _____

b. Second pair: _____

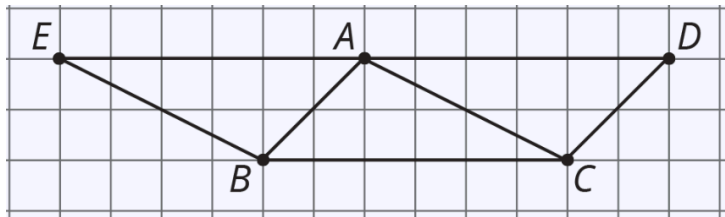


5. (Lesson 14) Lines AD and BC are parallel. Find the measures of the three interior angles in triangle ADE.



6. (Lesson 16, Act. 2) Here is $\triangle ABC$. Line DE is parallel to line AC .

- a. Look at angles EAB, BAC, & CAD. Without measuring, write what you think is the sum of the measures of these angles. Explain or **show** your reasoning.
- b. Which angle in triangle ABC is congruent to angle EAB? Justify your reasoning.



- c. Which angle in triangle ABC is congruent to angle CAD? Justify your reasoning.

7. (Lesson 14, PP 1) Use the diagram to find the measure of each angle.

- a. $m\angle ABC$
- b. $m\angle EBD$
- c. $m\angle ABE$

