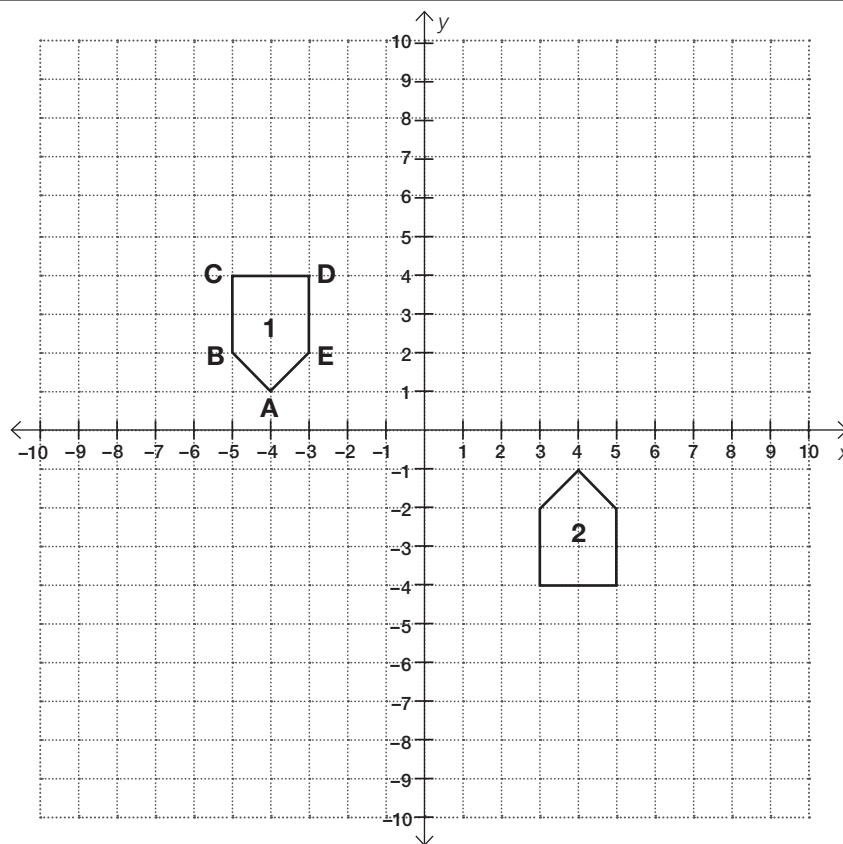


Figure 2.6
Sample Transformations Using the Coordinate Grid

8.G.3: I can describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.

Directions: Use the following diagram to answer the questions.



2a. Describe a series of transformations (reflection, rotation, translation, or dilation) that proves figure 1 is congruent to figure 2.

2b. Justify your answer to 2a.

2c. If you do a *translation* followed by a *reflection*, does it still map figure 1 to figure 2? How do you know?

Source: Adapted with permission from Aptakasic Junior High School, Buffalo Grove, Illinois.

Source for standards: National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). Common Core State Standards for mathematics. Washington, DC: Authors. Accessed at www.corestandards.org/assets/CCSSI_Math%20Standards.pdf on February 7, 2014, p. 56.