

## Math 7 Domain: Geometry – Transformations

### Day 4A

Learning Outcome – Students will be able to reflect or rotate any point on a coordinate graph.

#### Clusters/Standards

8.G.1 Verify experimentally the properties of rotations, reflections, and transformations.

8.G.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

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

8.G.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations: given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.

#### Activities

**Do Now:** Make sure your skills check is out for collection.  
What transformation has occurred?

- 1)  $A(6,-5)$  has become  $A'(-6,-5)$     **reflect over y**
- 2)  $B(-1,3)$  has become  $B'(3,1)$     **rotate 90 degrees clockwise**
- 3)  $C(-4,10)$  has become  $C'(4,-10)$     **rotate 180 degrees**

Have a student answer the do now and explain.

Collect skills check.

Have students read the front of the notes and complete the back independently. Go over the back when all are done. Pass out “preptask” for students to do quickly and check in with their neighbor.

Students can start their actual preptask with a person of their choice.

Closure: How do you translate a point on a coordinate graph?

**PrepTask:** Working with Translations

**Evaluation:** PrepTask, Quiz, class participation