Unit 1 Lesson 17: Working with Rigid Transformations

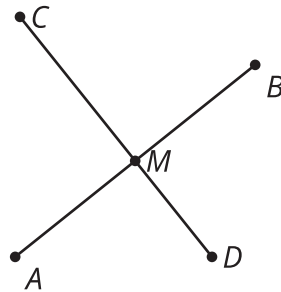## 1 Math Talk: From Here to There (Warm up)

Student Task Statement

Segment CD is the perpendicular bisector of segment AB. Find each transformation mentally.

A transformation that takes A to B.

A transformation that takes B to A.

A transformation that takes C to D.

A transformation that takes D to C.

2 Card Sort: How Did This Get There?

Student Task Statement

1. Your teacher will give you a set of cards that show transformations of figures.

    a. Sort the cards into categories of your choosing. Be prepared to explain the meaning of your categories.

    b. Then sort the cards into categories in a different way. Be prepared to explain the meaning of your new categories.

2. For each card with a rigid transformation: write a sequence of rotations, translations, and reflections to get from the original figure to the image. Be precise.

3 Reflecting on Reflection

Student Task Statement

Diego says, "I see why a reflection could take $RSTU$ to $R'S'T'U'$, but I'm not sure where the line of reflection is. I'll just guess."

1. How could Diego see that a reflection could work without knowing where the line of reflection is?

2. How could Diego find an exact line of reflection that would work?

Images for Activity Synthesis