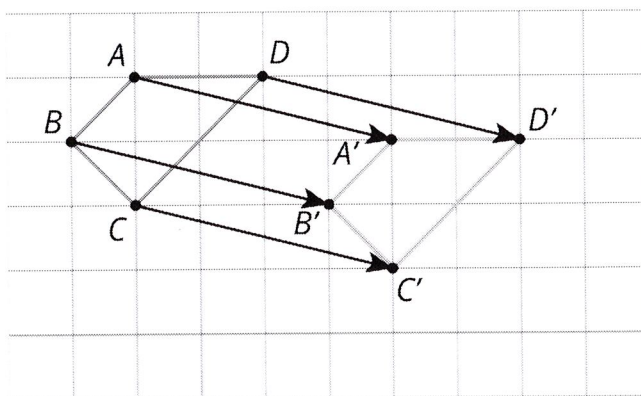


Lesson 4 Summary

A move, or combination of moves, is called a **transformation**. When we do one or more moves in a row, we often call that a **sequence of transformations**. To distinguish the original figure from its image, points in the image are sometimes labeled with the same letters as the original figure, but with the symbol ' attached, as in A' (pronounced "A prime").

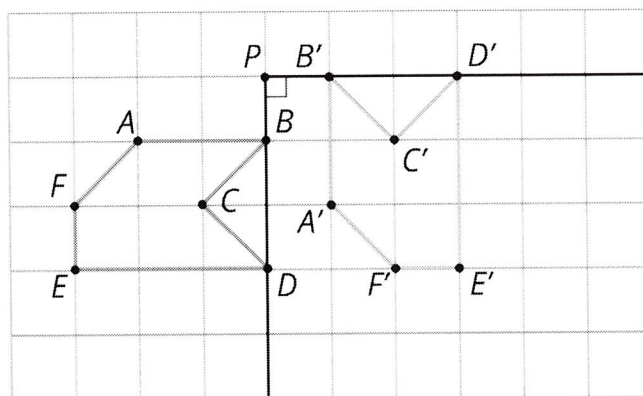
- A translation can be described by two points. If a translation moves point A to point A' , it moves the entire figure the same distance and direction as the distance and direction from A to A' . The distance and direction of a translation can be shown by an arrow.

For example, here is a translation of quadrilateral $ABCD$ that moves A to A' .



- A rotation can be described by an angle and a center. The direction of the angle can be clockwise or counterclockwise.

For example, hexagon $ABCDEF$ is rotated 90° counterclockwise using center P .



- A reflection can be described by a line of reflection (the "mirror"). Each point is reflected directly across the line so that it is just as far from the mirror line, but is on the opposite side.

For example, pentagon $ABCDE$ is reflected across line m .

