

Isometries are the transformations of the plane which preserve distance.

Translation

Rotation

Reflection

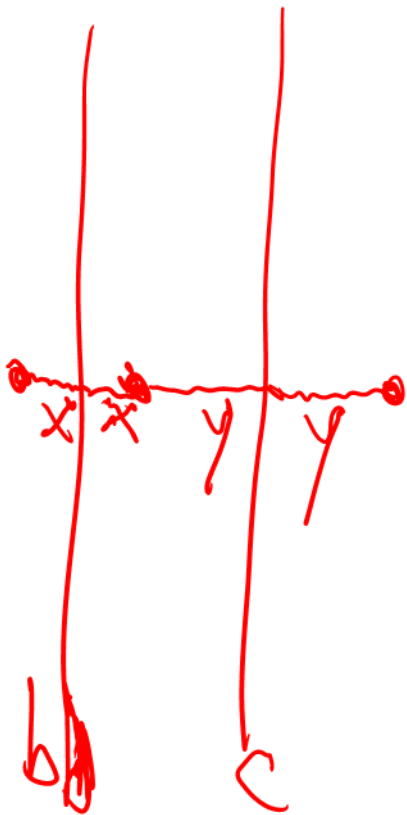
... and any combination of those

Isometries of the Plane, p. 3, 5

Glide Reflection

# Isometries of the Plane, p. 7

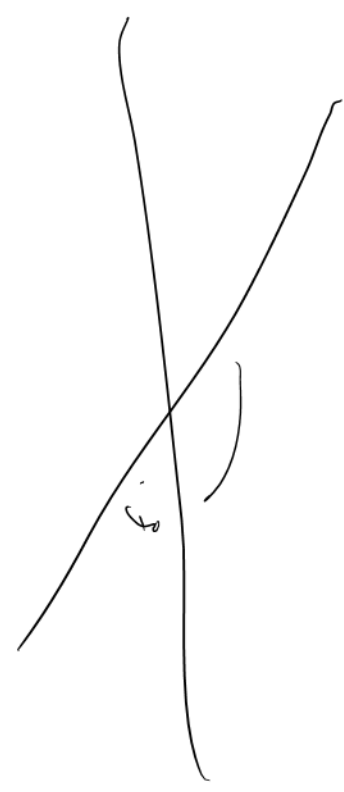
Composition (use GeoGebra)



$$2x + 2y = 2(x + y)$$

# Composition

Two reflections (parallel)



Two reflections (intersecting)



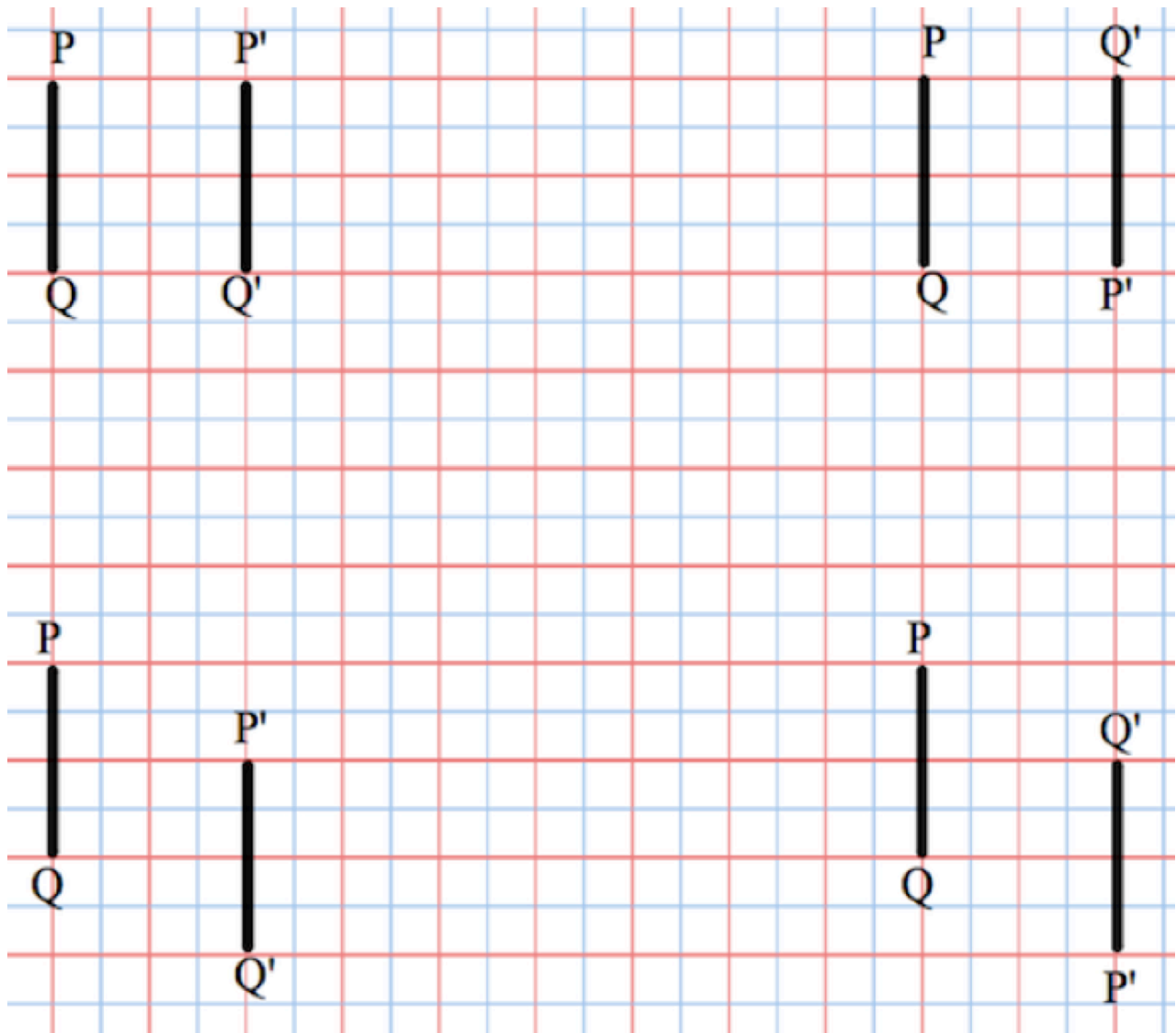
How Many Points?

One?



Two?

# Isometries of the Plane, p. 8



Three points

How many reflections?



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One, Two, or Three Reflections