Talk the Talk

1. You translate a line segment vertically or horizontally. Is the length of the image the same as the length of the pre-image? Explain why or why not.

2. If both endpoints of a line segment were not moved the same distance or direction, would the length of the line segment change? Would this still be considered a translation? Explain your reasoning.

3. What can you conclude about the length of a line segment and the length of its translated image that results from moving points on a coordinate plane the same distance and the same direction?

4. What can you conclude about the length of a line segment and the length of its translated image that results from construction?

Be prepared to share your solutions and methods.

© Carnegie Learning