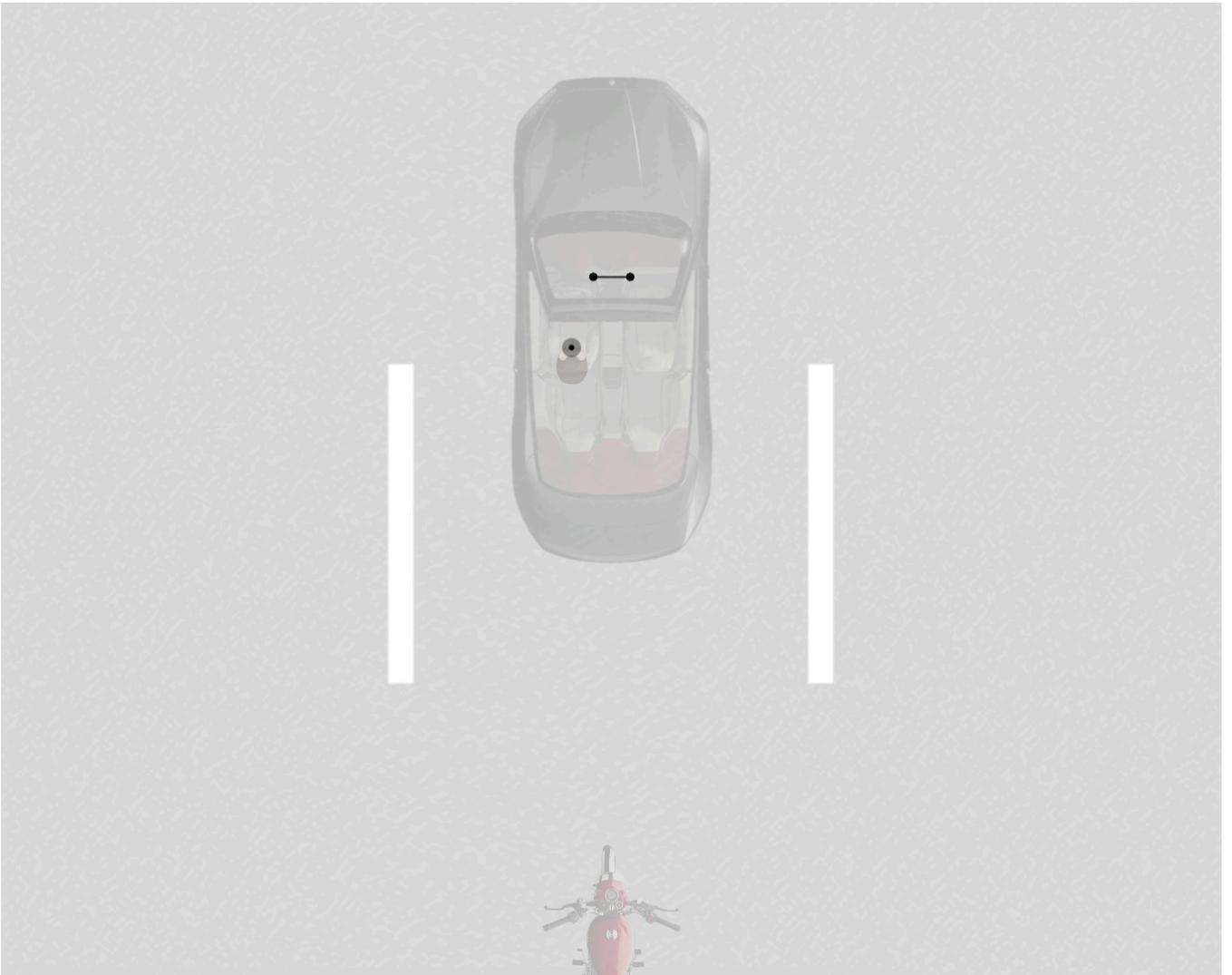


Part One: Rear Mirror

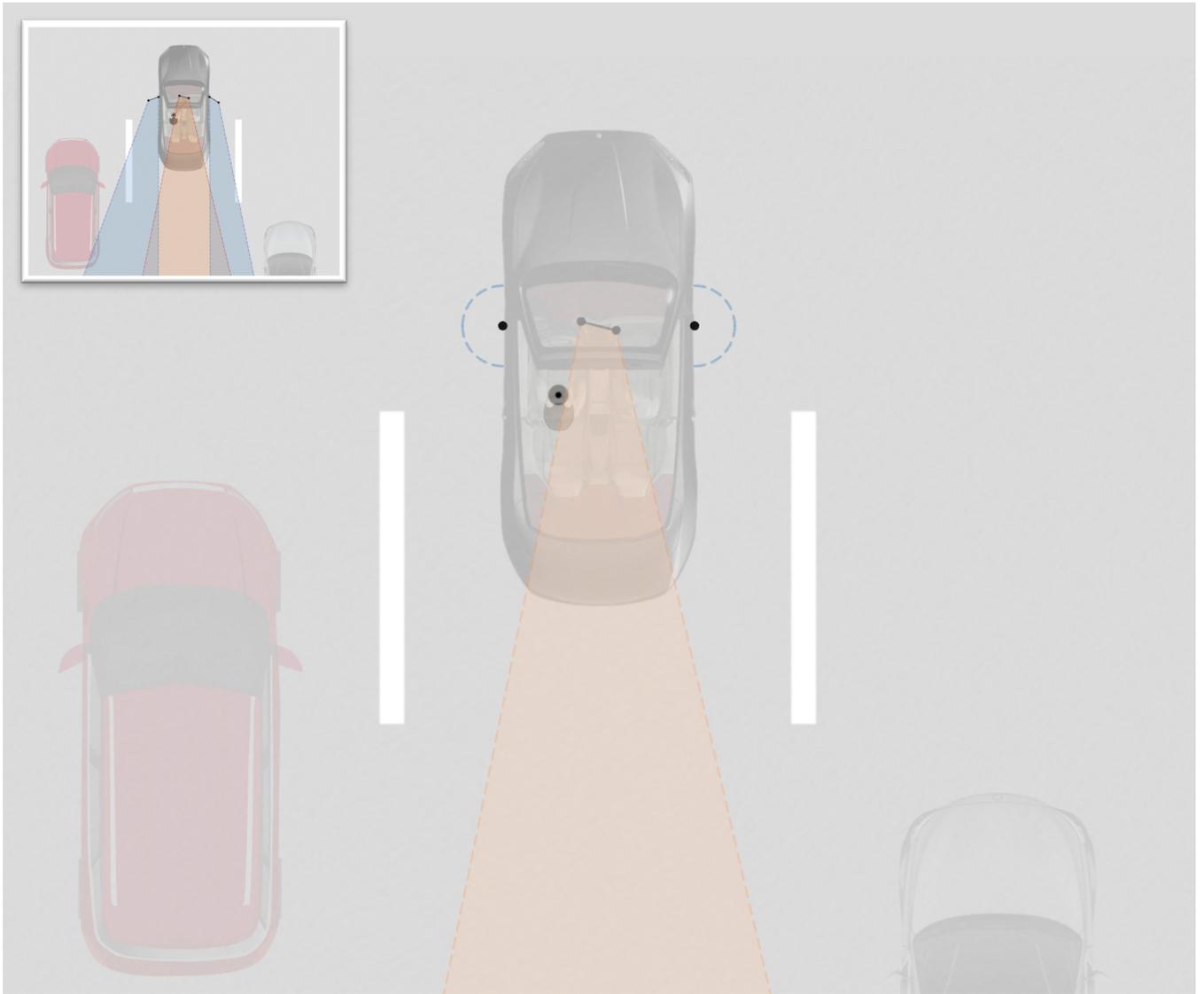
- 1 When you're driving, it's important to be aware of what's around you. Imagine a driver positions his rear-view mirror as shown in the diagram below. Construct a model showing the region he'll be able to see behind him.

Do you think this is a good way to position the mirror? If not, how would you suggest the driver adjust it and why?



Part Two: Two Sided Issue

- 2 In addition to a rear-view mirror, cars also have side-view mirrors. Many drivers position these to see the edges of the car, as shown in the inset below. However, this results in dangerous blind spots. On the diagram below, construct a safer positioning of the left and right mirrors, and shade in the regions that will now be visible to the driver. (Note: the dashed semi-circles represent the mirror radius.)



- 3 Watch the video about how to properly adjust the side mirrors, then describe the process in your own words. Geometrically, why does this method help to reduce the blind spots in the left and right lanes?