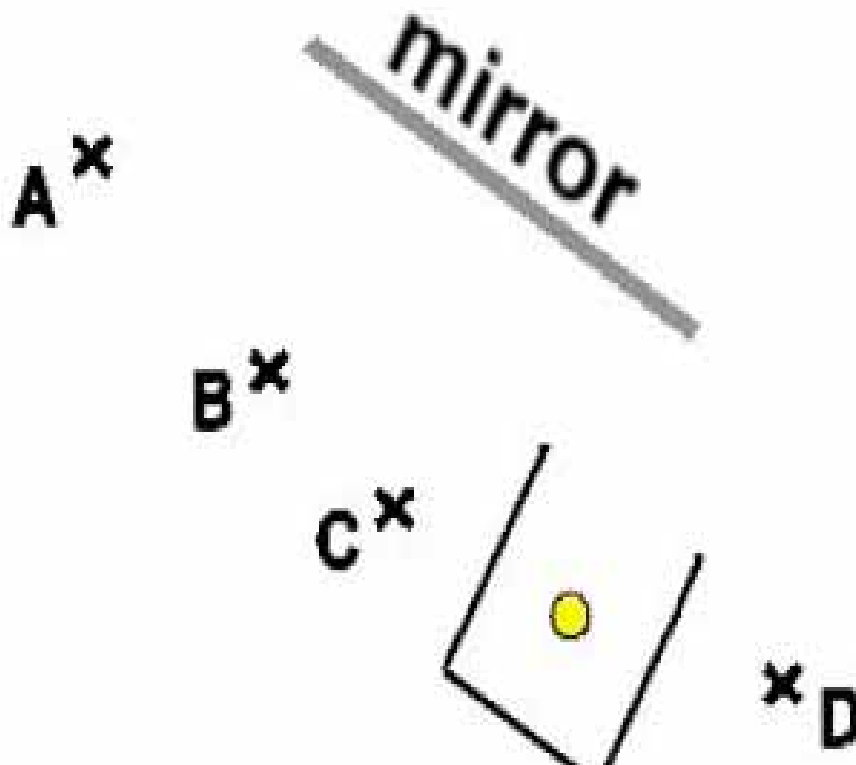


In tutorial, we developed a method, called “the Mel and Taylor method,” to determine where an object appears to be. We individually use this method, each of our eyes serving as “Mel” or “Taylor”. Our brains combine the information coming from our two eyes (in particular, the difference between the angles the two eyes have to turn in order to look directly at the object) to decide where that object is.

In the figure at the right is shown a top view of a mirror and a bulb in an opaque housing. Use the M&T method to decide whether you could see the image of the bulb in the mirror and where your brain would place the image if you stood at the points A, B, C, and D.

Draw your lines carefully using a ruler and a protractor.



Did you find that you could see the bulb from all of the four points? If not, which ones could you not see them from? Explain why not.

For those points from which you could see the bulb, does your diagram say that would your brain interpret the light it received in these different cases as coming from an object sitting at a single place in space? Or as you moved from one point to the other does the position of the bulb appear to change?

Is this what you expect happens in the real world? If not, reconcile the discrepancy.