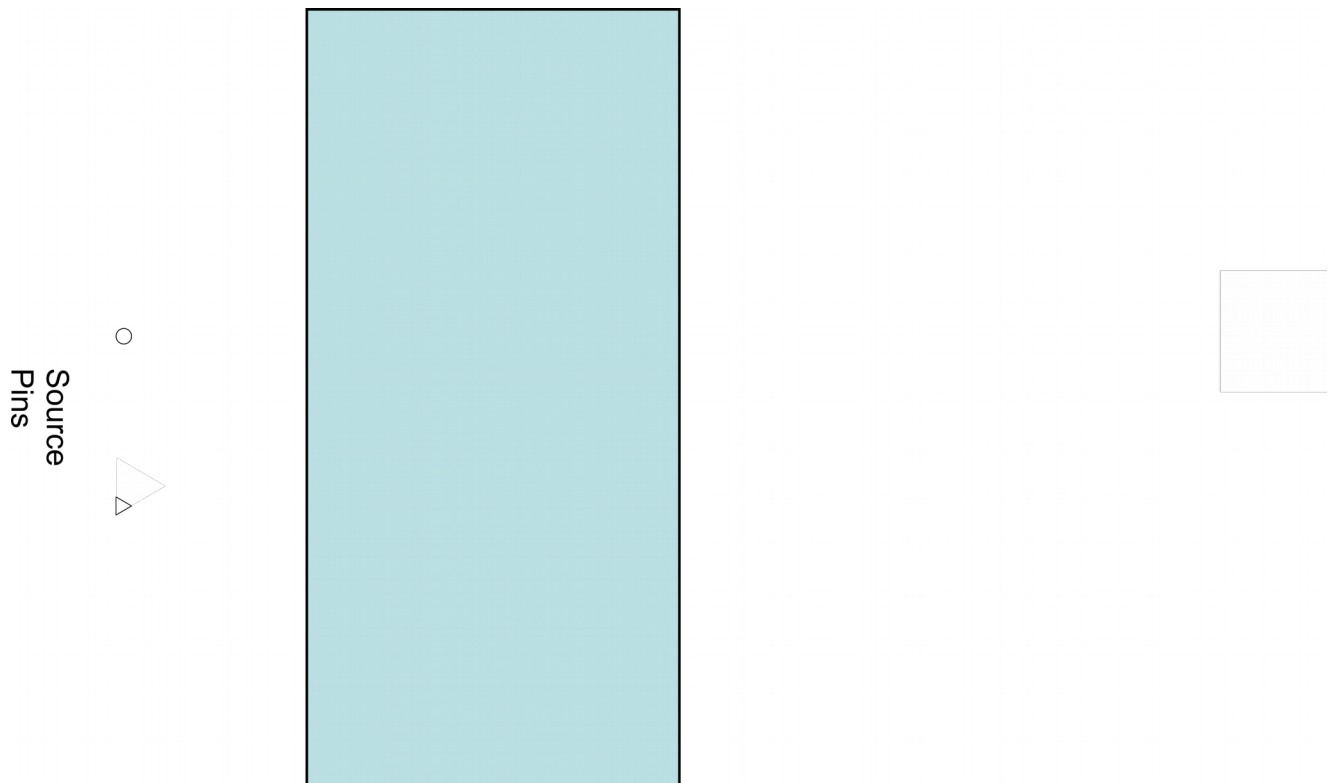
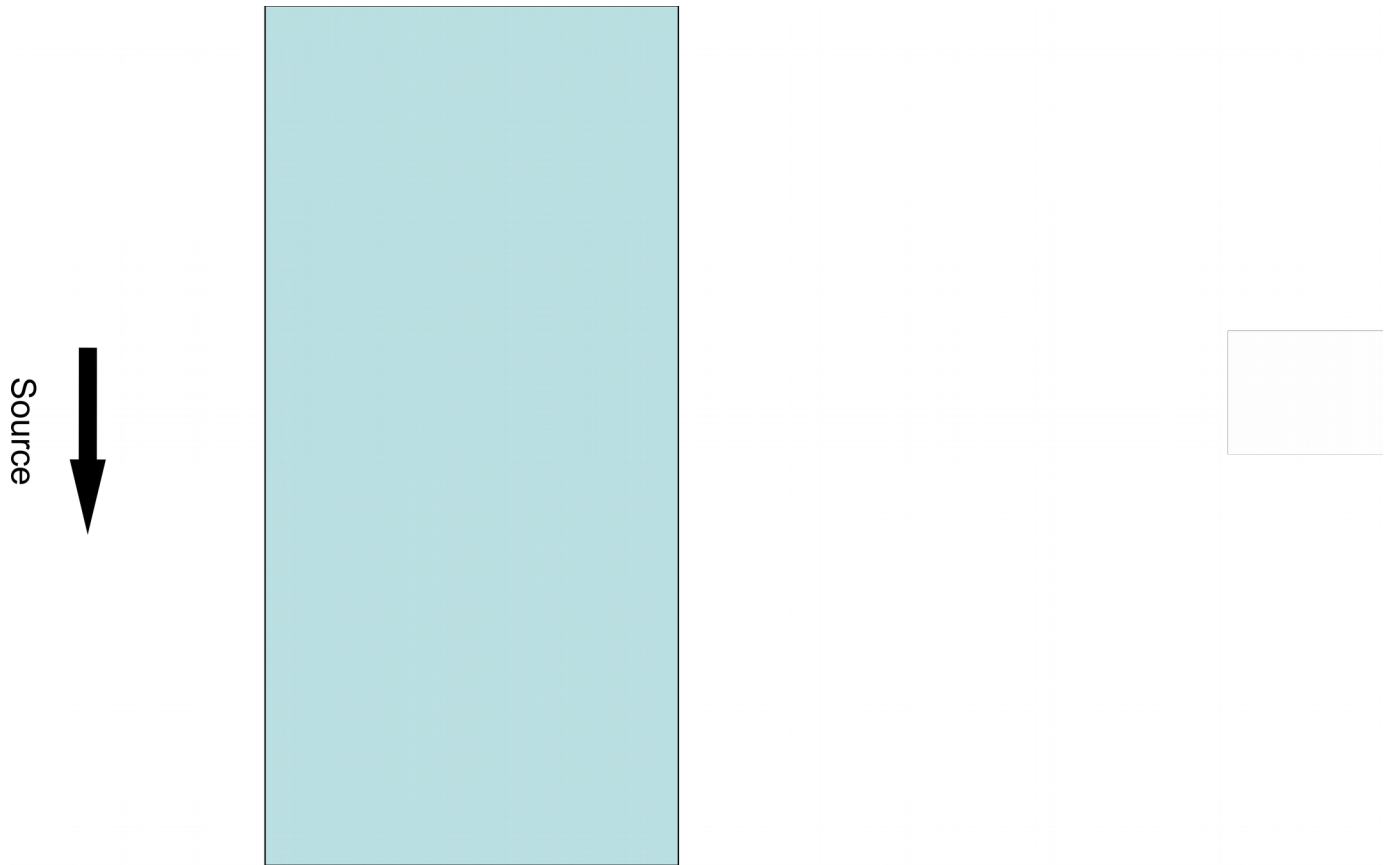


- I. Two source pins are located behind a rectangular tank filled with water (see figure below). Accurately draw (using rays) where the image of both pins will be located. Assume the index of refraction of water is 1.3.
Hint: pick one ray that is trivial to trace, and then draw another ray using Snell's Law.



- II. The two source pins are now replaced by a large arrow (see figure below). Accurately draw (using rays) where the image of the arrow will be located. Assume the index of refraction of water is 1.3.



- III. Two source pins are located behind a semicircular tank filled with water (see figure below). Accurately draw (using rays) where the image of both pins will be located. Assume the index of refraction of water is 1.3. Hint: pick one ray that is “easier” to trace, and then draw a second ray. Use Snell's Law.

