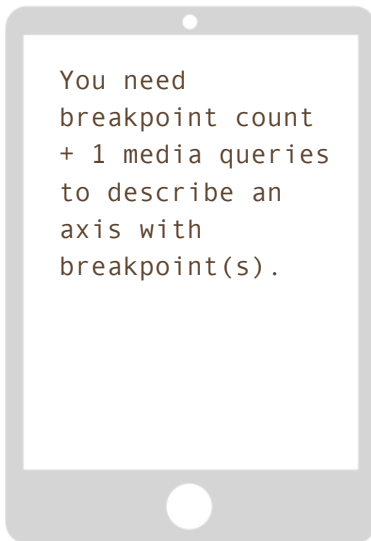# Responsive Breakpoint Theory Cheatsheet

horizontal axis

segment

All breakpoints create a segment to their left and either a segment or a ray to their right.

breakpoint 1

You need breakpoint count + 1 media queries to describe an axis with breakpoint(s).
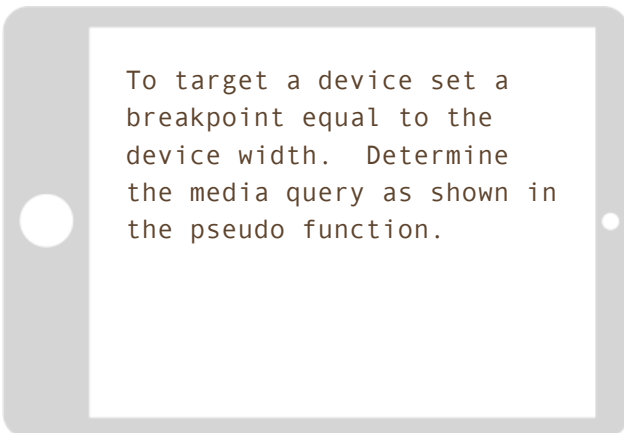
```
var breakpoints = [768, 1024];
function getMediaQuery(segmentIndex) {
  if (segmentIndex === 1) {
    return "max-width:767px";
  } else if (segmentIndex > breakpoints.length) {
    return "min-width: 1024px";
  } else {
    return "(min-width:768px) and (max-width:1023px)";
  }
}
```

breakpoint 2

segment

ray

To target a device set a breakpoint equal to the device width. Determine the media query as shown in the pseudo function.

The highest value breakpoint always creates a ray to it's right. There is only ever one ray.

To optimize an image for a segment, use the value of the breakpoint to the right, subtract 1, and resize to that value. To optimize for the ray, you have to pick a sensible width greater than the value of the highest breakpoint, which takes into account probable max screen size.