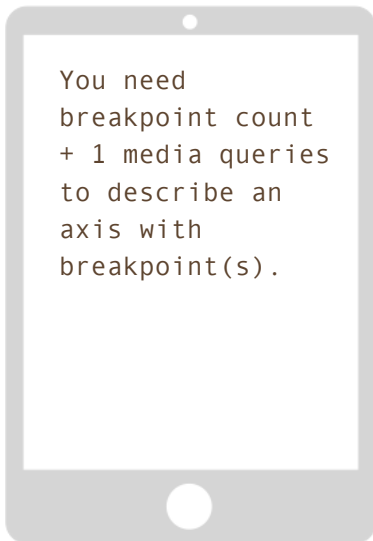# Responsive Breakpoint Theory Cheatsheet

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).
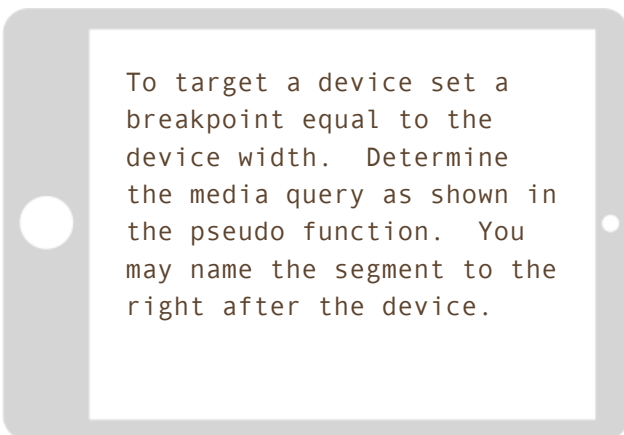
```
var breakpoints = [768, 1024];
function getMediaQuery(segmentIndex) {
  if (segmentIndex === 1) {
    return "max-width:767px";
  } else if (segmentIndex > breakpoints.length) {
    return "min-width: 1024px";
  } else {
    return "(min-width:768px) and (max-width:1023px)";
  }
}
```

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. You may name the segment to the right after the device.

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.