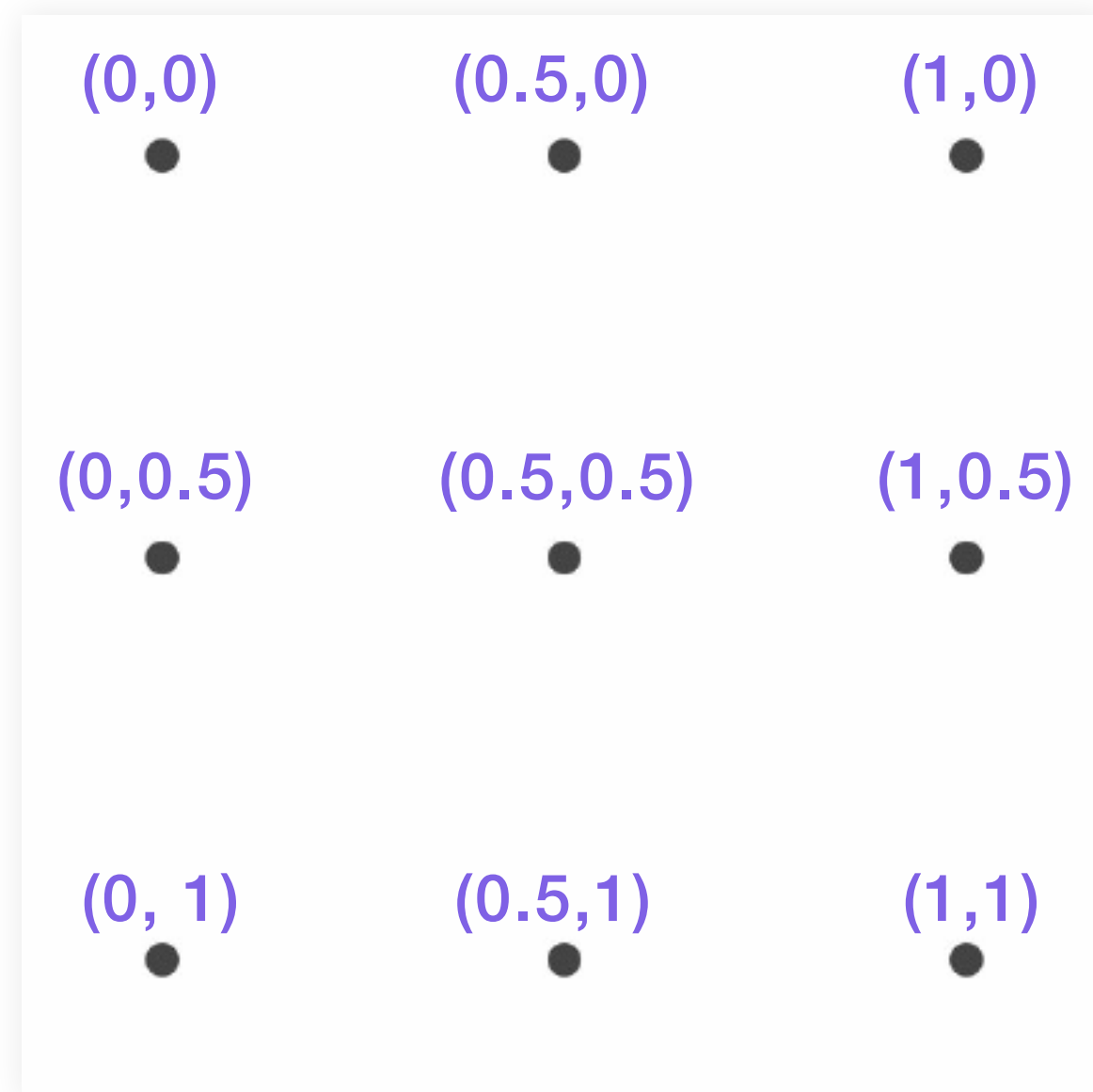# UV vs XY
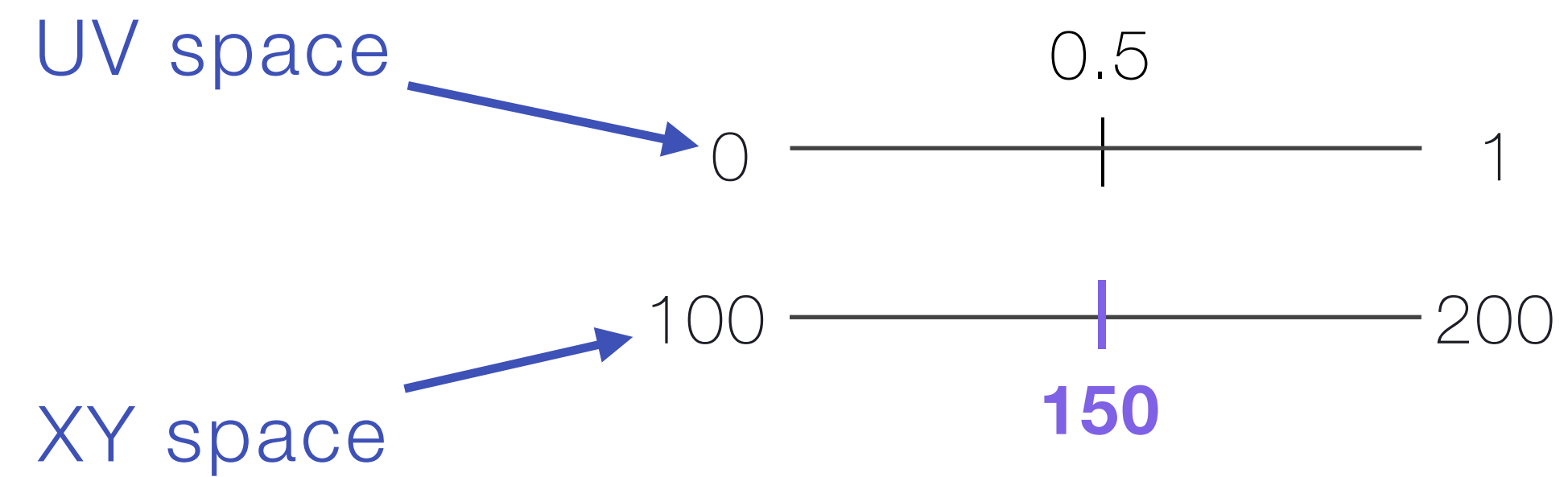
Normalization


```
private fun DrawScope.drawGrid(...) {
    (0 until dotCount).forEach { x →
        (0 until dotCount).forEach { y →
            // get uv coordinates from 0 to 1
            val u = x / (dotCount - 1)
            val v = y / (dotCount - 1)

            // val xOffset = ??
            // val yOffset = ??

            drawCircle(
                color = DarkGray,
                radius = 20f,
                center = Offset(xOffset, yOffset)
            )
        }
    }
}
```

Convert (0, 1) to an X,Y offset ? 🤔

lerp()

Linear interpolation - 0-1 range to another range

UV space

0.5

0 —————————|————————— 1

100 —————————|————— 200

150

XY space

```
(max - min) * inputValue + min
```