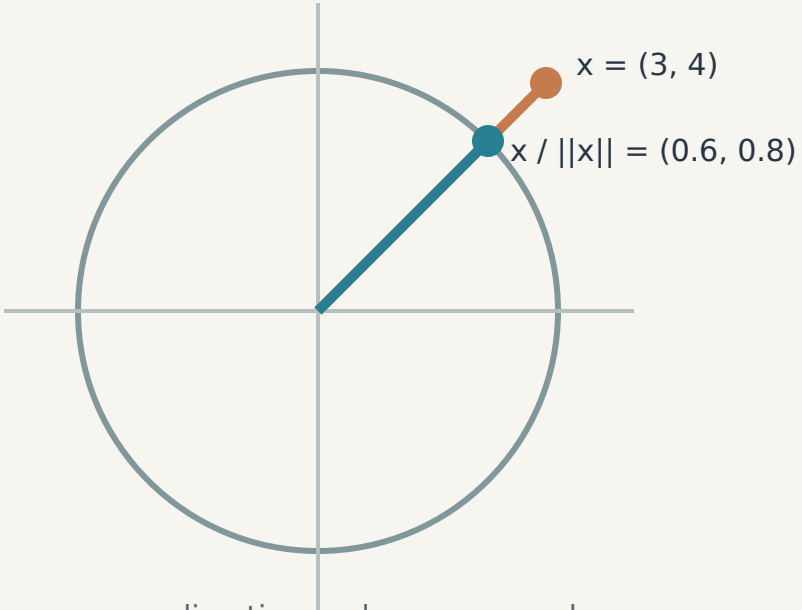
KEEP DIRECTION · REMOVE OVERALL SCALE



same direction

different magnitude

$||x / ||x|||| = 1$

Normalization preserves direction and removes scale.