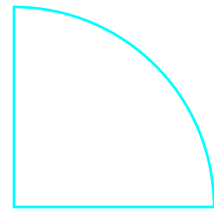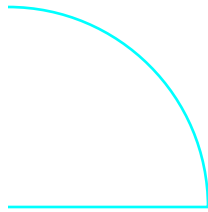Notice the difference in stroking when using stroke_ versus fill_and_stroke:

If you want to stroke both sides when stroking include :stroke_both_sides => true