VI: (took 101 iterations to converge)

V([3.173325912716963, -3.0])

V([1.5866629563584815, -1.5306122448979593])

V([3.173325912716963, 0.06122448979591821])
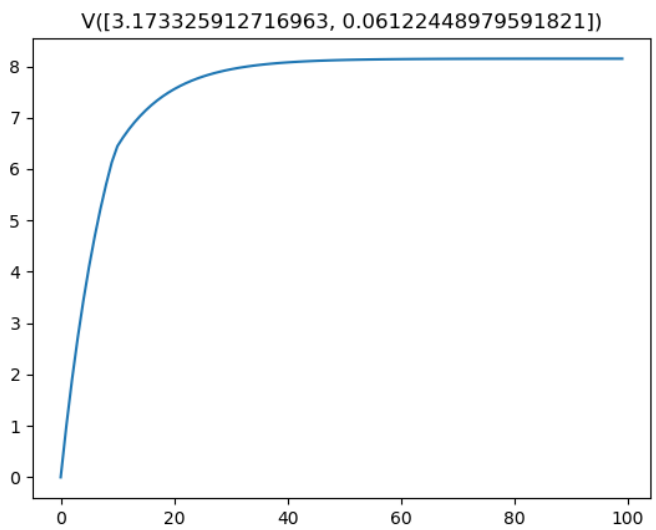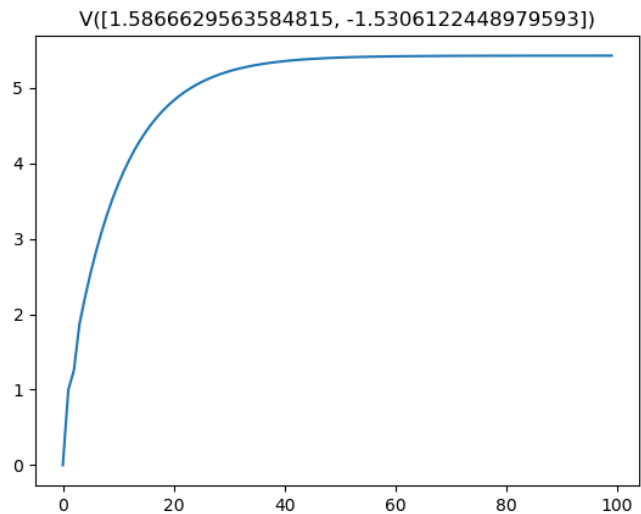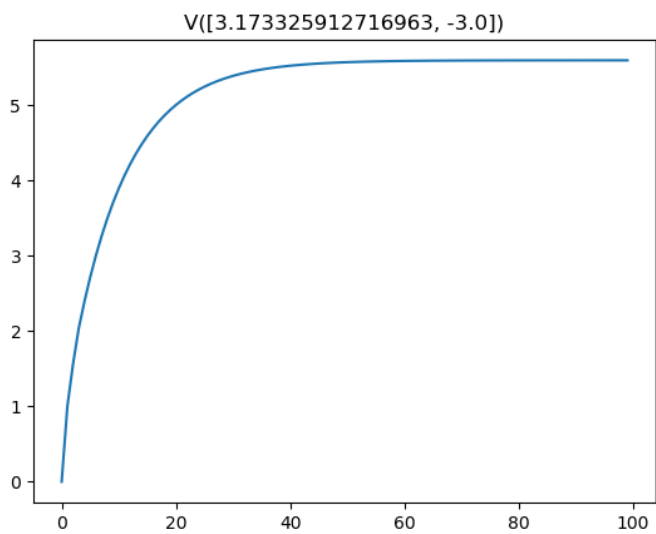
PI: (took only 8 iterations to converge)

V([3.173325912716963, 0.06122448979591821])

V([3.173325912716963, -3.0])

V([1.5866629563584815, -1.5306122448979593])
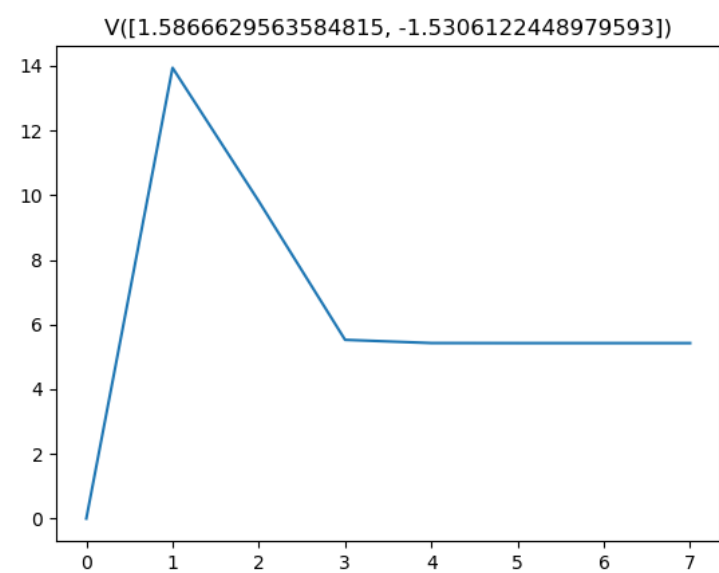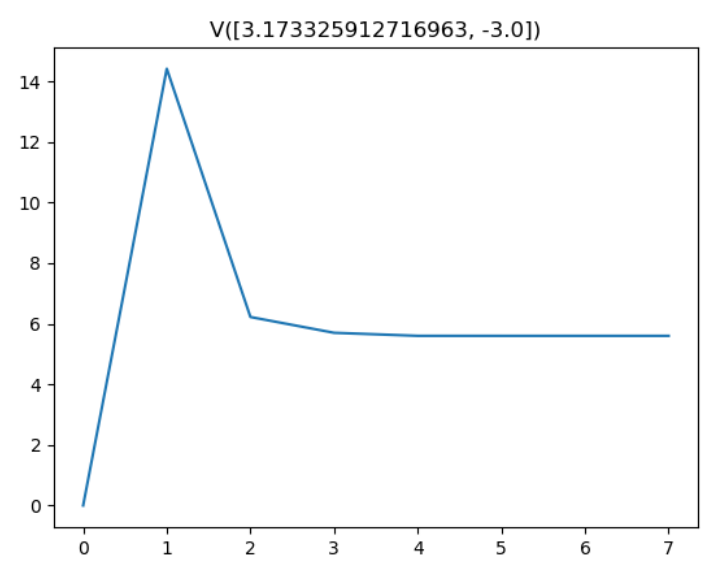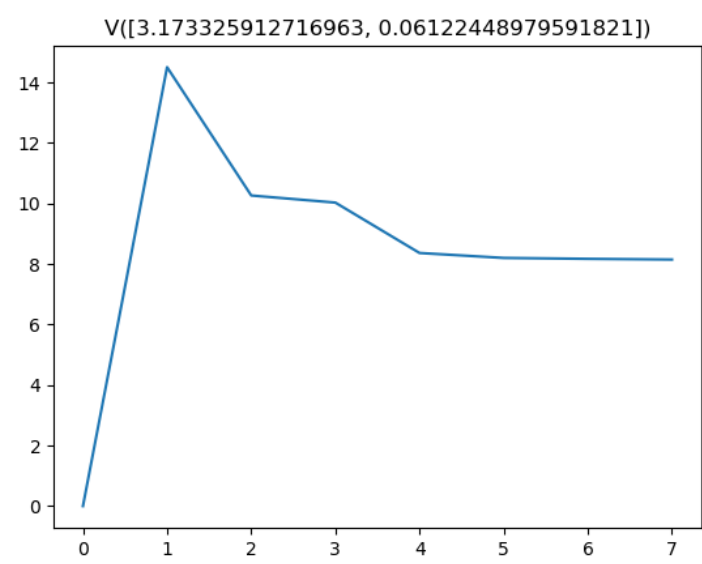
Optimal Value Function and Optimal Policy (x-axis is angle from 0 to 2*pi) (y-axis is velocity from -1 to 1) :
When sigma/noise = 0.1:

If sigma/noise. = 0.6: