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Matlab code.

Command window.

clear

format long

V = 0.5

for i = 1:100

$$V(i+1) = \text{sqrt}((C(500 + \log(CV(i)))) - 3) * (34.3 + 0.020 * V(2000)) / 0.3)$$

$$-C_n(i+1) = \text{abs}((CV(i+1) - V(i)) / V(i+1)) * 100;$$

if  $C_n(i+1) < 1E-11$

break

end

view('on')

plot('x', 'o')

axis tight

grid on

grid minor

iter	V	E <sub>n</sub>
0	0.5	0
1	239.05	99.791
2	294.17	18.736
3	302.16	2.7995
4	303.85	0.4099
5	304.04	0.06153
6	304.06	0.008821
7	304.07	0.0012744
8	304.07	0.0002944
9	304.07	0.9635E-12

converging at  $\lambda = 7$ , find  $V = 304.07$   
 $\therefore$  the converging value for  $P$  from to  $L = 304.07$

$$\frac{1-\lambda}{50 + (\ln V)^3} = 0.02V$$

if  $V = 304.07$

$$\frac{1-7}{50 + (\ln 304.07)^3} = 0.02 \times 304.07$$

$$= 0.3 \times (\ln 304.07)^3 = 0.2 (304.07)$$

$$50 + (\ln 304.07)^3$$

$$= 34.25 \approx 34.3$$