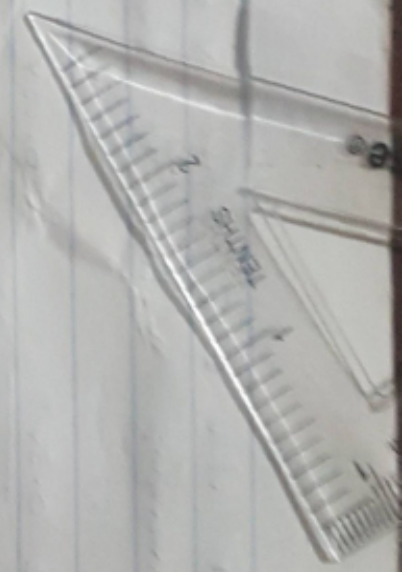


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Matlab code:

Command Win-Flow.

clear

format long

V = 0.5

for i = 1:100

V(i+1) = sqrt((500 + log(V(i))) * 3) * (34.3 +

cos(20 * V(2))) / 0.3)

Ea(i+1) = abs((V(i+1) - V(i)) / V(i+1)) * 100;

if Ea(i+1) <= 1E-11

break

end

figure 'v', 'Ea'

plot [V, Ea]

axis tight

grid on

grid minor

iter	V	Ea
0	0.5	0
1	239.05	99.791
2	294.17	15.736
3	302.16	2.7995
4	303.85	0.4099
5	304.04	0.060153
6	304.06	0.0088241
7	304.07	0.0012944
8	304.07	0.0012944
9	304.07	0.9635E-12

converging at $x = 7$, find $V = 304.07$
 \therefore the converging value of P is given to be 304.07

$$\overline{101} = \frac{0.3V^2}{50 + (\ln V)^3} - 0.02V$$

$$\text{if } V = 304.07$$

$$Yc. \overline{101} = 9.8 \times 3.8 = 34.3$$

$$\begin{aligned} &= 0.3 \times (304.07)^2 - 0.2 (304.07) \\ &= 50 + (\ln 304.07)^3 \\ &= 34.25 \quad \underline{\underline{m}} \quad 34.3 \end{aligned}$$