(6)

(c)

→ Implemented quadroots and added it on the same graphs for the smaller root.

We found that the log(y) values for new root are more negative (in general) than previous ones which is on the log scale.

Thus we can infer that the new formula is giving better results.

⇒ But still there are other errors in the new formula which might include toruncation errors, rounding errors etc, butt as compared to the values calculated by the previous function, they are much better. (Gaps in the line denotes no error).

NOTE: Since it is a log scale, the less the error the more negative the value gets.

⇒ for a small number $< 0|$ and > 0, log gives a negative number whose magnitude increases as the number gets smaller.

⇒ Smaller error gives higher negative value (magnitude)