

Given the following equation:

$$y = ax^b \pm \sqrt{c - x^d}$$

Where:

a → number of years lived

b → $\frac{\text{give}}{\text{receive}}$ ratio

c → number of meaningful relationships
(familial, platonic, and romantic)

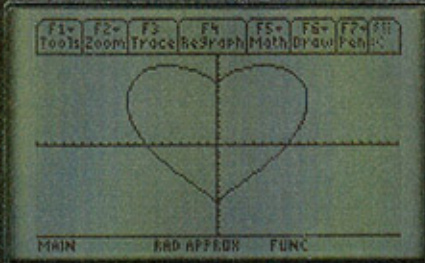
d → compatibility index (must be even), expressed as:

$$d = d - \lfloor d \% 2 \rfloor$$

- i. Plug in your values and graph the function. (25 pts)
- ii. Using the techniques you've learned thus far, rotate the resultant curve about the y-axis to create your 3-dimensional heart (25 pts)
- iii. Integrate to find your individual Capacity for Love (50 pts)

TEXAS INSTRUMENTS

TI-89



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