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Set $x^3 + 7x = 4 = (x^2 + 7)x$ and then $x = 4/(x^2 + 7)$. Now make a *first* guess of $x = \frac{1}{2}$ and use it on the *right*-hand side to calculate $4/(.5^2 + 7) = .55...$ Let .55 be your *second* guess and get $4/(.55^2 + 7) = .5477...$ for your *third* guess. Repeat this process for greater and greater accuracy.

for greater and greater accuracy.

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My name is Dr. George McCarty. I teach math at the University of California. I wrote this guidebook to cut through the confusion. It does just that — with worked-out examples, simple exercises and practical problems — all designed to work with precision and magic on your calculator!

POWER METHODS. Need to evaluate functions, areas.

precision and magic on your calculator!

POWER METHODS. Need to evaluate functions, areas, volumes – solve equations – use curves, trig, polar coordinates — find limits for sequences and series? It's all here! If you're in the biological, social or physical sciences, you'll be doing Bessel functions, carbon dating, Gompertz' growth curves, half-life, future value, marginal costs, motion, cooling, probability, pressure – and plenty more (even differential equations).

Important numerical techniques? Those algorithms are here, too: rational and Padé approximation, bracketing, continued fractions, Euler's method, Heun's method, iteration functions, Newton's method, predictor-corrector, successive substitutions, Simpson's method and synthetic division.

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to see it start out with a wild guess and then approach the limit and stop."
Professor John A. Ball of Harvard College (author of the book 'Algorithms for RPN Calculators') writes: "I wish I had had as good a calculus course."
Professor H. I. Freedman of the U. of Alberta, writing in Soc. Ind. Appl. Math Review, states: "There can be no question as to the usefulness of this book...lots of exercises...very clearly written and makes for easy reading."

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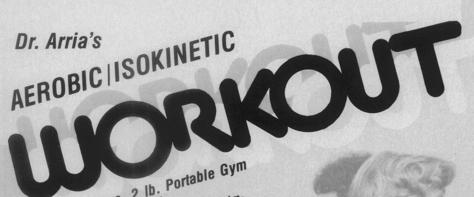
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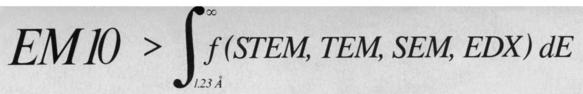
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