Solving on the TI Calculator

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Solver

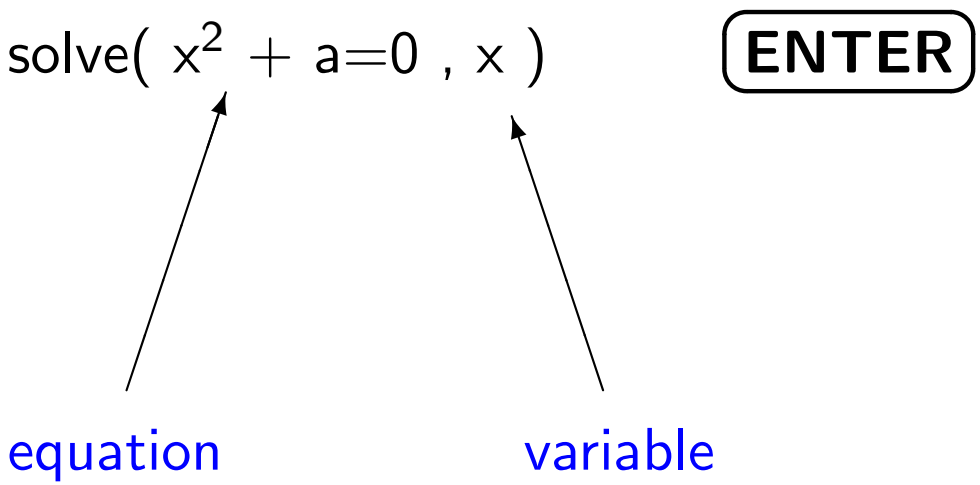
Graphing

Numeric Solver

Solver

From the Homescreen, we will use the 'solve' command.

F2 **1** 1: solve(



solve cont

solve(x^2 − 3 = 0 , x) **ENTER**

Gives solutions, $x = \pm\sqrt{3}$

For the equation, $5 \cdot 2^x = 320$ try,

solve(5*2^x = 320 , x) **ENTER**

Gives solution, $x = 6$

Graphing

To Solve,

$$.05\,x^3 - .25\,x^2 - x + 8 = 4$$

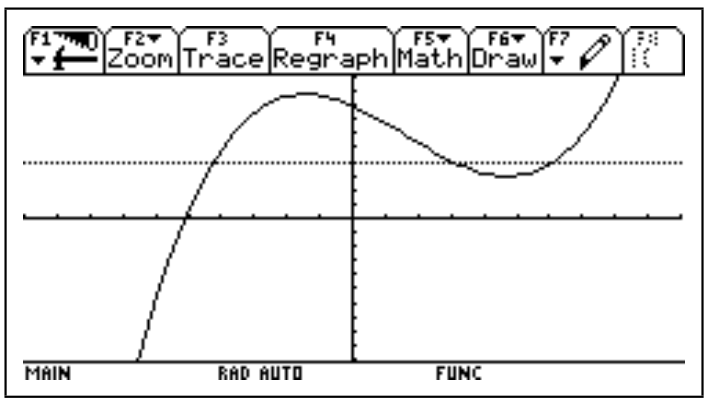
graph cont.

$$y1 = .05 * x\text{^}3 - .25 * x\text{^}2 - x + 8$$

Set,

$$y2 = 4$$

Find the intersection between the two graphs.



graphing cont

The intersections give,

$$\begin{aligned} x_1 &\approx 3.0883438 \\ x_2 &\approx 6.134386 \\ x_3 &\approx -4.22273 \end{aligned}$$

Numeric Solver

$$A = w \cdot l$$
$$P = 2\,w + 2\,l$$

numeric solver cont

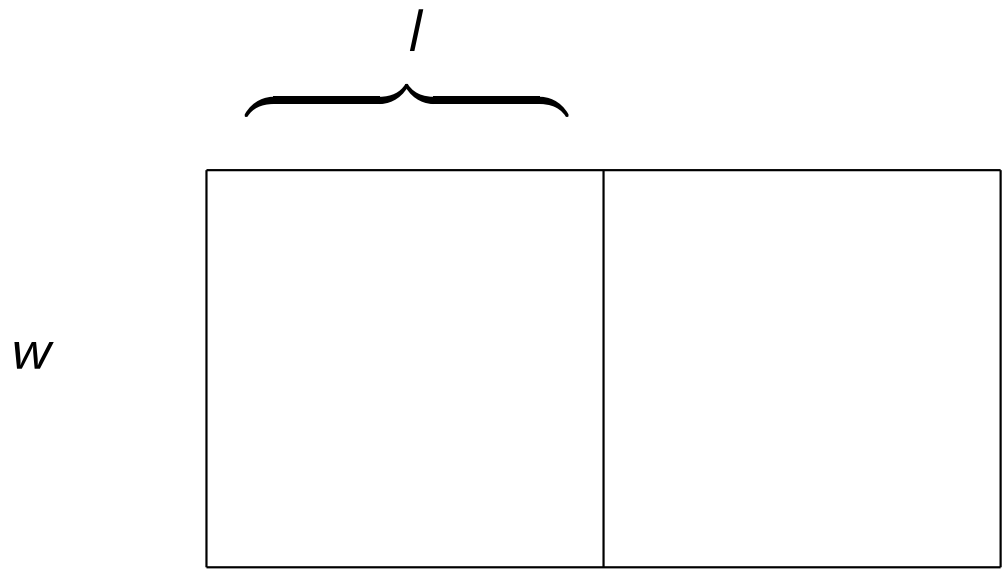
Let's put the perimeter formula into the numeric solver.

APPS **9** 9: Numeric Solver

$p = 2 * w + 2 * l$ **ENTER**

- $p = 2045$ **F2**
  $w = 10$
  $l = 12.5$

numeric solver cont



$$A = 2\,w \cdot l$$

$$P = 3\,w + 4\,l$$