

Objectives

- Solve polynomial equations by graphing.

Keywords

Example 1: Solve a Polynomial Equation by Graphing

Use Desmos graphing calculator to solve $x^4 + 3x^2 - 5 = -4x^3$ by graphing.

Step 1 Find a related function. Write the equation with 0 on the right.

Step 2 Graph the related function.

Step 3 Find the zeros.

The real zeros are about and

Check

Use a graphing calculator to solve $4x^2 + x = \frac{1}{2}x^4 + 1$ by graphing.
Round to the nearest hundredth, if necessary.

$x = \text{_____} ? \text{_____}$