Find all the zeros of \( g(x) = 3x^4 + x^3 - 10x^2 + 2x + 4 \)

1. List the **Possible Rational Zeros** \( \frac{p}{q} \):

2. Use the calculator to estimate zeros \((x\text{-intercepts})\) that may be from the list above:

   **Test** the zeros using **synthetic division**

4. Using the **new polynomial**: Graph it and **test** another zero using **synthetic division**

5. Write as a new polynomial. Then find the remaining zeros \((\text{factor, quadratic formula, or complete the square})\).

Now use your knowledge of end behavior and solutions to sketch a graph of the given polynomial.
Find all the zeros of \( f(x) = 4x^3 - 12x^2 - x + 15 \)

1. List the **Possible Rational Zeros** \( \left( \frac{p}{q} \right) \):

2. Use the calculator to estimate zeros (x-intercepts) that may be from the list above:

3. **Test** the zeros using *synthetic division*

4. Using the **new polynomial**: Graph it and **test** another zero using *synthetic division*

5. Write as a new polynomial. Then find the remaining zeros (*factor, quadratic formula, or complete the square*).

Now use your knowledge of end behavior and solutions to sketch a graph of the given polynomial