

1) Determine degree of function

- end behavior
- # of turning pts.
- # of zeros

2) Q: Am I given any information about factors/zeros?

~~Q~~ No

- a) Does function factor or can I use Quad. Formula

b) Descartes Rule of Signs.

- How many of each type of zeros.

c) Rational Zero Test

- list of possible rational zeros

d) Test rational zero list in the function to find any rational zeros.

Zeros

1 Imag

2 (+) Real $\left\{ \begin{array}{l} \text{Rat.} \\ \text{Irr.} \end{array} \right.$

3 (-) Real $\left\{ \begin{array}{l} \text{Rat.} \\ \text{Irr.} \end{array} \right.$

~~Q~~ arched pairs

Yes

a) Divide using synthetic or long division until I have a second degree depressed polynomial.

b) Quad. Formula to find remaining zeros.