

Complex Numbers and Fundamental Theorem of Algebra

Review for Quiz

Find all zeros of the function and write the polynomial as a product of linear factors.

1) $f(x) = x^3 - x^2 + 36x - 36$

2) $f(x) = x^3 + 2x^2 - 3x - 10$

3) $f(x) = 2x^4 + 3x^3 + 16x^2 + 27x - 18$

Form a polynomial $f(x)$ of least degree given the following zeros.

4) zeros: $1 + i$ and -6

5) zeros: -1 , 2 , and $1 - 2i$

6) zeros: -4 and $3 - 2i$