

Grace Murray Hopper was one of the most influential women in the world of computer science. However, she did have a lot to do with mathematics. She introduced the closed convex polygon, which is applied to the deduction of irreducibility criteria. This was dependent on the size and the divisibility properties of the coefficients. For the closed convex polygon, an approximate multiplication theorem holds and may be used to deduce irreducibility criteria depending on the size of the coefficients. A convex polygon is a closed figure in a plane whose angles are less than 180 degrees. Grace Murray Hopper found a way to convert a polynomial into a convex polygon. With this conversion she found a way to decompose the polygon the way that Eisenstein broke down the polynomials.