Answer on Question #57436 – Math – Algebra

A polynomial has one root that equals $5 - 7i$. Name another root of this polynomial.

Solution

The root of a polynomial $f(x)$ is such a value that satisfies the equation $f(x) = 0$.

Since $5 - 7i$ is a complex number, and complex roots always go in conjugate pairs, the other root of this polynomial is $5 + 7i$ – the conjugate of the given root.

Answer: $5 + 7i$.