

Problem 1 If the complex number $6 - 3i$ is a zero of the polynomial $p(x)$, what other number do you know must be a zero of $p(x)$?

Feedback(attempt): Remember that if $a + bi$ is a zero, then its complex conjugate, i.e. $a - bi$ is also a zero. So, to find the other zero, you need to swap the sign in front of the imaginary term.

Problem 2 If the complex number $-7 + 10i$ is a zero of the polynomial $p(x)$, what other number do you know must be a zero of $p(x)$?

Feedback(attempt): Remember that if $a + bi$ is a zero, then its complex conjugate, i.e. $a - bi$ is also a zero. So, to find the other zero, you need to swap the sign in front of the imaginary term.

Problem 3 If the complex number $-2 + i$ is a zero of the polynomial $p(x)$, what other number do you know must be a zero of $p(x)$?

Feedback(attempt): Remember that if $a + bi$ is a zero, then its complex conjugate, i.e. $a - bi$ is also a zero. So, to find the other zero, you need to swap the sign in front of the imaginary term.

Problem 4 If the complex number $-4 - 5i$ is a zero of the polynomial $p(x)$, what other number do you know must be a zero of $p(x)$?

Feedback(attempt): Remember that if $a + bi$ is a zero, then its complex conjugate, i.e. $a - bi$ is also a zero. So, to find the other zero, you need to swap the sign in front of the imaginary term.