

Unit 3 Day 6 - Writing Polynomial Functions Given the Zeros

For #7-12: Write the polynomial function of least degree with the following zeros.

7) $-5, i$

8) $-1 + i, \sqrt{5}$

9) $-3 + \sqrt{5}, -i$

10) $2, -2 + \sqrt{10}$

11) $-1, 5, -2 + \sqrt{5}$

12) $2 - 2i, 1 - 2i, 1 + 2i$

Review #1-6: Find the zeros of each function.

1) $f(x) = (2x - 1)(x - 5)$

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

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

4) $f(x) = x(5x - 2)(x^2 + 1)$

5) $f(x) = x(x + 2)(x - 2)(3x^2 - 4)$

6) $f(x) = (2x - 1)(x^2 + 3)(2x^2 - 5)$