





Lost Week's Answer

31. If the zeros of a quadratic function are -1 and 3, one possible function containing these zeros is:

A. $f(x) = x^2 + 2x - 3$ D. $f(x) = x^2 - 2x + 3$ B. $f(x) = x^3 - 2x^2 - 3x$ E. $f(x) = 2x^2 + 4x - 6$

Solution: One method to write a quadratic equation given two roots, p and q, is to think backwards from the way you would use factoring to solve a quadratic equation. The pattern (x-p)(x-q)=0 produces one such equation:

(x - (-1))(x - 3) = 0(x + 1)(x - 3) = 0 x² - 3x + x - 3 = 0 x² - 2x - 3 = 0

In fact, there are an infinite number of equations that have these same two roots. By multiplying both sides of the equation by the constant 2 and then rewriting using function notation, you'll recognize the answer E.

Each week, we'll reveal the answer to the previous week's question!

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