

**Pre-AP Pre-Calculus**  
**WS: Finding Zeros of Polynomials**  
**Fall 2018**

Name \_\_\_\_\_

Date \_\_\_\_\_ Per \_\_\_\_\_

Find all zeros of the following polynomials. You must show all work and attach it to back of this answer sheet:

1.  $f(x) = x^3 + 3x^2 - 9x - 27$
2.  $f(x) = 2x^4 - 2x^3 - 24x^2$
3.  $f(x) = x^4 + 9 - 10x^2$
4.  $P(x) = x^3 - 5x^2 - 22x + 56$
5.  $P(x) = x^4 - 3x^3 - 5x^2 + 3x + 4$
6.  $P(x) = x^3 + 3x^2 - 25x + 21$
7.  $P(x) = 3x^3 + 14x^2 + 13x - 6$
8.  $P(x) = 2x^5 - x^4 - 2x + 1$
9.  $P(x) = 4x^3 + 4x^2 - 11x - 6$
10.  $P(x) = 4x^3 + 4x^2 - 3x + 10$
11.  $P(x) = 6x^4 + 22x^3 + 11x^2 - 38x - 40$
12.  $P(x) = 5x^4 - 29x^3 + 55x^2 - 28x$
13.  $P(x) = 3x^4 - 23x^3 + 19x^2 + 27x + 6$

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