

Pre-Calculus A  
Chapter 4 Review  
Calculator

Name \_\_\_\_\_

Write a polynomial function, in general form, whose zeros and degree are given.

1. Zeros: 3, -2 multiplicity of 2, -4; degree: 4

2. Zeros: 2, -i, 3 + i; Degree 5

Find the real zeros of  $f$ . Write  $f$  in factored form with respect to the real number system. If possible, use a graphing utility to find the first zero. Then, find the remainder of the zeros algebraically.

3.  $f(x) = 3x^3 + x^2 - 19x + 15$

4.  $f(x) = x^4 - 22x^2 - 75$

5.  $f(x) = 7x^3 - 2x^2 - 35x + 10$

Find all zeros. Write the function in factored form.

6.  $f(x) = x^3 + 125$

7.  $f(x) = x^4 - 256$