

Complex Zeros of Functions

NAME: _____

DATE: _____

WEEK: _____

Find all zeros as well as complex zeros of the following functions. (Set = to 0).

1. $f(x) = x^2 - 9$

2. $f(x) = x^2 + 9$

3. $f(x) = x^2 - 27$

4. $f(x) = x^2 + 68$

5. $f(x) = x^2 - 121$

6. $f(x) = x^2 + 27$

7. $f(x) = x^2 - 81$

8. $f(x) = x^2 + 125$

Find all zeros as well as complex zeros of the following functions.
(Use the quadratic formula to determine the zeros).

$$\text{Quadratic Formula: } \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

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

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

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

4. $f(x) = x^2 + 2x + 5$

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

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