Algebra II 5-4

Domain and Zeros of Rational Functions

Function-

Rational Function-

Domain-

What must always be a concern when working with Rational Functions?

Zeros-

What has to be true about a fraction that is equal to zero?

Find the domain and the zeros for the following functions.

*1)
$$f(x) = \frac{x-2}{x+5}$$
 *2) $f(x) = \frac{1}{x^2 - 5x - 6}$
Domain:
Zeros: Zeros:

*3)
$$f(x) = x^2 - x - 12$$
 *4) $f(x) = \frac{x^2 - 2x - 15}{x - 5}$

Domain:

Domain:

Zeros:

Zeros:

*5)
$$f(x) = \frac{1}{x^2 + 4}$$

Domain:

Zeros:

Assignment: Pg. 228 Oral: 7-15 all, Written: 21-28 all