Algebra 2 Name_____

Rational Root Theorem

Date_____ Block ____

State the possible rational zeros for each function.

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

2) $f(x) = 3x^4 - 22x^2 - 16$

3) $f(x) = x^3 - 1$

4) $f(x) = 3x^3 - 7x^2 - 7x + 3$

5) $f(x) = 3x^5 + 6x^4 + 10x^3 + 20x^2 + 3x + 6$

6) $f(x) = 10x^5 + 5x^4 + 2x^3 + x^2 - 8x - 4$

State the possible rational zeros for each function. Then find all rational zeros.

7) $f(x) = 2x^3 - 3x^2 - 3x + 2$

8) $f(x) = 3x^3 + 7x^2 + 5x + 1$

9) $f(x) = 2x^3 - 7x^2 + 7x - 2$

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

11) $f(x) = 5x^3 - x^2 - 5x + 1$

12) $f(x) = 3x^3 + 5x^2 + x - 1$