

5-6 Factoring Polynomials and Rational Zeros #2

Date _____ Period _____

State the possible rational roots for each equation.

1) $x^6 + 4x^4 - 16x^2 - 64 = 0$

2) $5x^3 + 25x^2 - x - 5 = 0$

Find all rational zeros. One zero has been given.

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

4) $f(x) = x^3 + 2x^2 - 4x - 8$; 2

5) $f(x) = x^3 + 5x^2 - 2x - 24$; -3

6) $f(x) = x^4 - 7x^3 + 7x^2 + 35x - 60$; 3

7) $f(x) = 2x^3 + 5x^2 - 18x - 45$; -3

8) $f(x) = 3x^3 + x^2 - 27x - 9$; -3