

121-G12
Fall, 2012

Quiz 10 – More Chapter 3

Name _____

3.3 Find the product (5 pts)

18. $[x - (3 - \sqrt{5})][x - (3 + \sqrt{5})]$

1. 3.3 Find a polynomial with real coefficients that has the given zero. (5 pts) Leave it in factored form: 28. $4 + i$

2. 3.3 Use the Rational Zeros Theorem (3 pts) and Descartes's Rule of Signs (3 pts) to find all real and imaginary roots of the equation. Final answer: (4 pts).

67. $6x^3 + 25x^2 - 24x + 5 = 0$

3. 3.4 Find all real solutions to the equation. (5 pts) Check your answers.

12. $\sqrt{x-1} = x-7$

4. 3.6 Solve the inequalities: (5 pts each)

95. $\frac{x-4}{x+2} \leq 0$

97. $\frac{q-2}{q+3} < 2$