

Name _____

Algebra 2 & Trig

Unit 3 Target 5 Remediation

1. Factor completely: $x^3 - 125$

2. Solve by factoring: $x^4 - 29x^2 + 100 = 0$

a. -5, -2, 2i, 5i

b. 2, 5, 2i, 5i

c. -25, -4, 4, 25

d. -5, -2, 2, 5

SOLVE each polynomial over the set of complex numbers by FACTORING. Provide exact solutions only. Irrational solutions must be in simplified form (no rounded decimals).

3. $3x^3 = 24$

Factored Form: _____

Solutions: _____

4. $5x^4 - 80x^2 = 0$

Factored Form: _____

Solutions: _____

5. $3x^3 + 2x^2 - 12x = 8$

Factored Form: _____

Solutions: _____