

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

Regular Advanced Algebra with Trig, Glawe

**GCF & Factoring Trinomials  $a > 1$**

Polynomials that cannot be factored at all should be considered *prime*. Find the complete factorization of each polynomial:

1)  $24x + 48y$

2)  $30mn^2 + m^2n - 6n$

3)  $14c^3 - 42c^5 - 49c^4$

4)  $4a^2b + 28ab^2 + 7ab$

5)  $2a^2 - 10a + 12$

6)  $x^3 + 2x^2 - 3x$

7)  $5x^2 - 25x^2 - 30$

8)  $3x^2 - 21x + 30$

9)  $3x^3 + 12x^2 - 15x$

10)  $-4x^2 - 28x - 24$

11)  $6x^2 + 7x - 3$

12)  $6y^2 - 11y - 2$

13)  $3x^2 - 2x - 5$

14)  $4x^2 - 3x + 2$

15)  $2x^2 - 11x + 15$

16)  $5z^2 - 11z + 2$

17)  $3x^2 - 10x + 5$

18)  $10x^2 - 16x + 6$