

**Pre-Calculus (Rubric A): Factoring Polynomials**

Name: \_\_\_\_\_

*Pre-Requisite Skills*

GRADING SCALE								
8 = 100%	7 = 93%	6 = 90%	5 = 87%	4 = 83%	3 = 77%	2 = 66%	1 = 63%	0 = 50%
Select math, apply math, and solve: <b>Unfamiliar Problems</b>		Select math, apply math, and solve: <b>Challenging Problems</b>		Select math, apply math, and solve: <b>Complex Problems</b>		Select math, apply math, and solve: <b>Simple Problems</b>		None of the previous

**Simple Problems****Level: 1-2**

1. $14x^2 - 21x$	2. $x^3 + 64$	3. $16x^2 + 8x + 1$	4. $x^3 - 216$
5. $x^4 - 49$	6. $27x^3 - 1$	7. $x^4 - 2x^2 - 15$	8. $3x^3 - x^2 + 9x - 3$

**Complex Problems****Level: 3-4**

9. $14x^4 + x^2 - 3$	10. $343x^3 - 27$	11. $25x^3 - 100x^2 - x + 4$	12. $4x^3 - 100x$
13. $8x^2 - 9x - 18 + 4x^3$	14. $2x^7 - 16x^4 + 24x$	15. $256x^4 - 81$	16. $128x^3 + 54$

**Challenge Problems**

Level: 5-6

17.  $9x^4 - 37x^2 + 4$

18.  $64x^3 + 216$

19.  $x^5 + 8x^2 - 4x^3 - 32$

20.  $2x^3 - 1024x^6$

21.  $108x^5 - 243x^3 - 4x^2 + 9$

22.  $-30x^8 + 4x^5 + 16x^2$

**Unfamiliar Problems**

Level: 7-8

23.  $75a^2c - 45a^2d - 30bc + 18bd$

24.  $x^7m + 2x^4m - 15xm$

25.  $x^{2n} + 9x^n - 10$