**Algebra 1 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Test Review – Factoring Date \_\_\_\_\_\_\_\_\_ Period \_\_**

**Method 1: Remove the GCF**

1. 7x2 + 28x 2. 12a2b - 15ab2 3. 9m4 - 12m2 + 3m 4. 2t3 – 6t2 + 10t

**Method 2: Trinomials with a lead coefficient of 1 (a = 1)**

5. x2 + 9x + 18 6. w2 - 6w – 40 7. y2 - 14yz + 24z2 8. x4 + 2x2 – 3

**Method 3: Trinomials with a lead coefficient greater than 1 (a > 1)**

9. 2x2 + 9x + 10 10. 6n2 + 13n – 8 11. 10z2 + 10z – 120 12. 3x2 + 8x +4

**Method 4: Grouping**

13. ax + 3ay + 2x + 6y 14. 4m2n - 2mn2 - 6m + 3n 15. 4xy - 12x + 8y – 24

16. x3 – 11x2 + 20x + 32 17. x4 – 4x3 + 2x2 – 8x 18. 3x3 – 6x2 + 15x – 30

**Method 5: Difference of Squares**

19. x2 – 100 20. 36m4 – 1 21. 64a8 – b20 22. 16x2 + 4

**Putting it all together!**

1. x2 – 12x + 36 2. 5a2 – 5a – 30 3. 2s2 – 3s – 5

4. 49x4 – 144y12 5. n3 + 9n2 – 25n – 225 6. 2x3 + 20x2 – 3x – 30