

**Algebra 0507****Chapter 9****WS # 1**

Name\_\_\_\_\_

**Write each number in prime factorization form.**

|         |         |         |
|---------|---------|---------|
| 1. 35   | 2. -49  | 3. -57  |
| 4. 75   | 5. -88  | 6. 38   |
| 7. 12   | 8. -24  | 9. 32   |
| 10. -28 | 11. 36  | 12. 40  |
| 13. 30  | 14. 48  | 15. 50  |
| 16. 39  | 17. -63 | 18. 104 |

**Write each as the product of two rational number factors.**

|                    |                    |                   |
|--------------------|--------------------|-------------------|
| 19. 12             | 20. $\frac{6}{14}$ | 21. 36            |
| 22. 54             | 23. 648            | 24. $\frac{1}{6}$ |
| 25. $\frac{4}{10}$ | 26. $\frac{8}{9}$  | 27. 13            |

**Find the GCF of each set of monomials.**

|                  |                         |                               |
|------------------|-------------------------|-------------------------------|
| 28. 24, 42       | 29. 18, 36              | 30. $3x^2, 12x^5$             |
| 31. 5, 7         | 32. 50, 28              | 33. $4xy^2, 6x^2y$            |
| 34. 4, 12, 20    | 35. 9, 12, 15           | 36. $2m^3n^4, 6m^2n^5, 8m^7n$ |
| 37. $5p^4, 7p^2$ | 38. $15a^4, 20a, 25a^4$ | 39. $12xy^2z^3, 3x, 15yz$     |