

Factoring  
Difference of Squares  
Worksheet

**Factoring Difference of Squares**

$$a^2 - b^2 = (a + b)(a - b)$$

**Note: Sum of Squares does not factor**

$$a^2 + b^2 \text{ does not factor}$$

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

Use the difference of squares formula to factor the following. Don't forget to factor out the GCF if necessary.

|                    |                    |                |
|--------------------|--------------------|----------------|
| 1. $x^2 - 9$       | 2. $y^2 - 25$      | 3. $x^2 + 1$   |
| 4. $16 - t^2$      | 5. $4x^2 - 1$      | 6. $16 - 9x^2$ |
| 7. $36t^2 - s^2$   | 8. $4p^2 - 9q^2$   | 9. $x^3 - 64x$ |
| 10. $2t^4 - 18t^2$ | 11. $4x^2y^4 - 49$ | 12. $x^4 - 81$ |