Factor the following binomials as a Difference of Two Squares. Make sure to factor out the GCF/CMF first before factoring the Difference of Two Squares. Watch out for Sum of Two Squares, which are included as distractors. Write "Prime" if you encounter them.

1. $4x^2 - 9y^2$

2. $a^2 + 4b^2$

3. $25x^6 - 36y^6$

4. $3p^4 - 48q^4$

5. $4y^2 - 9$

6. $49x^4 - 25y^8$

7. $2x^2 + 8y^2$

8. $20a^2 - 45b^2$

9. $5m^2 - 320n^2$

10. $z^2 + 25w^2$

11. $6p^2 - 54q^2$

12. $7s^3 - 448s$

13. $x^{10} - 64y^{10}$

14. $9x^2 - 225y^2$

15. $8r^3s - 32rs^3$

16. $2m^2p - 200n^2p$

17. $2a^5 - 32ac^4$

18. $4k^6 + 16w^6$

19. $5x^2y^2 - 20y^4$

20. $b^{10} - 64c^6$