

Solve.

1. $8x^3 - 27 = 0$

4. $x^4 + x^2 - 2 = 0$

2. $x^4 - 10x^2 + 16 = 0$

5. $125x^3 + 8 = 0$

3. $x^3 + 1 = 0$

6. $x^4 - 13x^2 + 36 = 0$

Verify and Prove the following identities.

7. $(a^2 + b^2)^2 = a^4 + 2a^2b^2 + b^4$

8. $(x - y)(y - x) = 2xy - x^2 - y^2$