Lesson 5: Factoring Binomials that are the Difference of Two Perfect Squares

State whether each polynomial is a difference of two squares. If it is, factor the expression.

1.) $n^2 - 81$

2.) $a^2 - 121$

3.) $n^2 + 16$

4.) $9x^2 - 144$

5.) $2x^2 - 9$

6.) $4w^2 - 9$

7.) $4n^2 - 1$

8.) $1 - 16x^2$

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

10.) $9 - c^2$

11.) $n^3 - 25$

12.) $16x^2 - 6y^2$

13.) $49 - 4a^2$

14.) $a^2b^2 - c^4$

15.) $4x^2y^2 - 9z^2$