Factoring Polynomials in Quadratic Form

Example 5a

Factor $x^4 + 2x^2 - 63$ completely.

Example 5b

Factor $3x^4 + 22x^2 + 40$ completely.

Example 5c

Factor $3p^8 + 15p^5 + 18p^2$ completely.

Example 5d

Factor $16x^4 - 81$ completely.

Check it Out! Examples

Factor each expression completely.

5a. $3x^4 - 3x^2 - 168$

5b. $x^4 - 3x^2 - 10$

5c. $4x^4 + 44x^2y^2 + 112y^4$

5d. $49x^4 - 1$