

Exercise 15

For the following exercises, find the degree and leading coefficient for the given polynomial.

$$x(4 - x^2)(2x + 1)$$

Solution

Count the number of x 's to determine the degree: 4. Multiply the coefficients of each power function to determine the leading coefficient: $1 \cdot (-1) \cdot 2 = -2$. These answers are apparent if the factored form is expanded.

$$4x + 8x^2 - x^3 - 2x^4$$