

Exercise 16

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

$$x^2(2x - 3)^2$$

Solution

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

$$9x^2 - 12x^3 + 4x^4$$