Introduction to Polynomials

Activity overview

In this activity, students will begin getting familiar with terminology of polynomials.

Vocabulary:

Terms*: The parts of an expression that are _________________ or _______________.
Example: Name the terms in the expression $3x + 8y$: ________________

Factors: The parts of a term that are _______________. Example: Name the factors of $3x^2y$: ________________

Polynomial*: An expression that contains one or more terms whose exponents are all whole numbers.

Monomial*: A polynomial expression that has exactly _______________ term  
Example:

Binomial*: A polynomial expression that has exactly _______________ terms  
Example:

Trinomial*: A polynomial expression that has exactly _______________ terms  
Example:

Degree*: The degree of a polynomial expression is the _______________ exponent on any variable.
Example:
Identify the following expression. Use special names if appropriate.

\( 2x^2 + 3 \)

- not a polynomial
- monomial
- binomial
- trinomial
- polynomial

You will use the CAS menu to find degree of several polynomials. At the end, you will have to write in your own words how a degree of a polynomial is determined.

On the next page:
Press MENU > 3: Algebra > 7: Polynomial Tools > 8: Poly Degree then type in your

3) Find the degree of the polynomial \( 4x \)

In your own words describe how to find the degree of a polynomial:

- Identify types and answer here:
- Suggested Response:

The degree of the following polynomial is:

\( 3x^2 - 2x + 5 \)

- 0
- 1
- 2
- 3
- 4