Monomials, Binomials, Trinomials

RaiseMyMarks.com

2021

What is a polynomial?

To answer this question we need to first understand what a "term" is. A **term** is something that looks like,

$$4x^2, 3x, 5, -x^4 \ \ etc.$$

There are two components to a **term**, the **coefficient** and the **variable**. The coefficient in the term $4x^2$ is 4 and the variable part is x^2. A **polynomial** is at least one term or the sum of any number of terms. Some examples of polynomials are,

$$3x^2 + 4x + 3$$
$$-5x + 3$$
$$6 + x^2$$

Monomials, binomials, trinomials, oh my!

A **monomial** is a polynomial with one term. For example,

$$3x^2, -4x, -7x^3$$

are some examples.
A **binomial** is a polynomial with two terms. For example,

$$4x + 2, x^2 - 6, x + 3x^2$$

are example of bionomials.
A **trinomial** is a polynomial with three terms. For example,

$$-2x^2 + 3x + 4$$
$$6x - 3 + 2x^2$$

are all trinomials.
We can add, subtact, multiply, divide and take powers of polynomials just as we can with numbers.

 ©Raise My Marks 2021

Exercises

Label each polynomial as a monomial, binomial, trinomial or polynomial for greater than trinomial.

(a) $x^2 + 3x^4 - 3$

(b) 6

(c) $y^2 + 2$

(d) $-3x^2 + 10x^9 + y^4 + 7$

(e) $-44y + 22y^2 + 14$

(f) $z^2 - z$

(g) $x^3 + 2x^2 - x - 1$

(h) $-\frac{1}{2}yx^2 + 4x$

(i) $\pi y^3 + y^4 + y^2 + y - 1$

(j) $-z^7 + 2z^6 - 3z^5$

 ©Raise My Marks 2021