**6.3 Adding, Subtracting and Multiplying Polynomials**

**Polynomial:**

**Constant:**

**Linear:**

**Quadratic:**

**Cubic:**

**Quartic:

Decide whether the function is a polynomial. If it is, write the function in standard form and state the degree, type and leading coefficient.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1.)** | y = 1 + 𝜋x2 | **2.)** | y = 3x2 + $\frac{1}{x}$ | **3.)** | y = $2x+ x^{\frac{1}{2}}$ |

**Adding and Subtracting Polynomials:**

**4.)** (x3 + 3x – 4) – (x2 – 2x + 1)

**Multiplying Polynomials:**

|  |  |  |  |
| --- | --- | --- | --- |
| **5.)** | (2x – 3)(x2 + 2x – 5) | **6.)** | (x + 1)(x + 2)(x – 3) |