## What is a Quadratic Equation?

A quadratic equation is any equation that can be written in the form:



## Which of the Following Equations are Quadratic?



Which of the following are Quadratics?



**Complete the following table by filling in the missing information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **y = ax2 +bx + c form** | **Factorized Form (Grade 10)** | **Co-ordinates of x intercept (***from factorized form***)** | **Co-ordinates of y intercept (***from factorized form***)** |
| **Example** | y = x2 + x – 6 | y = (x+3)(x-2) | (-3,0) and (2,0) | (0,-6) |
|  | y = x2 |  |  |  |
|  | y = 2x2 |  |  |  |
|  | y = x2 + 3 |  |  |  |
|  | y = x2 + 2x – 8 |  |  |  |
|  |  | y = (2x+3)(x-4) |  |  |
|  |  |  | (5,0) (-1,0) | (0,10) |