Quadratic Characteristic

Domain: the set of all the first elements (inputs) of a relation. (* x-values)

Range: the set of all the second elements (outputs) of a relation (* y-values)

x-intercept: a point $(x, 0)$ @ which a graph crosses or touches the x-axis.

y-intercept: a point $(0, y)$ @ which a graph crosses or touches the y-axis.

Zeros: where a graph crosses or touches the x-axis, which gives a coordinate pair of $(x, 0)$

Maximum: the greatest y- or f(x)-value of a function.

Minimum: the least y- or f(x)-value of a function.

Vertex: the point in which the maximum or minimum is found. Also known as the turning point. (x, y)

Axis of Symmetry: A vertical line that divides the parabola into two congruent halves. The axis of symmetry always passes through the vertex of the parabola.

Direction of Opening: If A in standard form, ax^2+Bx+C, is positive the parabola opens up. If A is negative the parabola opens down. Or based on where arrows face.