Functions and Graphing I

Q1. Plot the following quadratic curves, each separately

(i) $y = x^2$
(ii) $y = -x^2$
(iii) $y = x^2 + 2x + 4$
(iv) $y = x^2 - 2x - 3$
(v) $y = x^2 - 2x - 8$
(vi) $y = 2x^2 - x - 3$

Q2. Plot the line $y = 4 - x$ and the quadratic curve $x^2 + 3x - 2$ on the same graph.

- Use the *trace* function on your calculator to find the points of intersection of the line and the curve.
- Find where the curve cuts the Y-axis.
- Now label the line and the curve.
- Use the *zoom* button on your calculator to enlarge your graph.
- Go to *table* to examine the set of ordered couples.