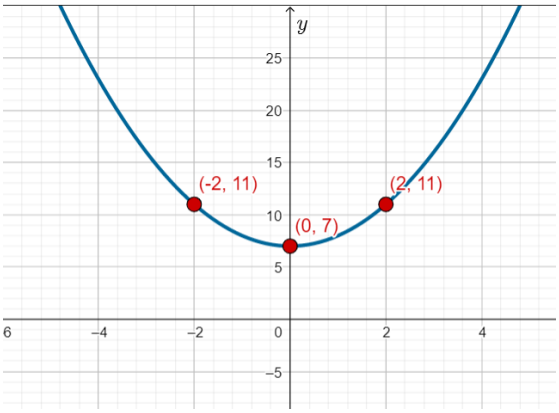
Quadratic Functions Identify the parabola

A quadratic function may be expressed in general as

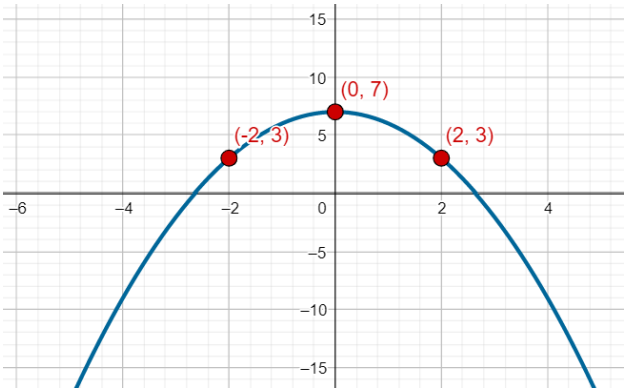
$$f(x) = ax^2 + bx + c, \text{ where } a \neq 0$$

Use the applet on https://tentotwelvemath.com/grade-11/grade-11-precalculus/3-quadratic-functions-and-equations/introduction-to-quadratic-functions/ to create the following parabolas.

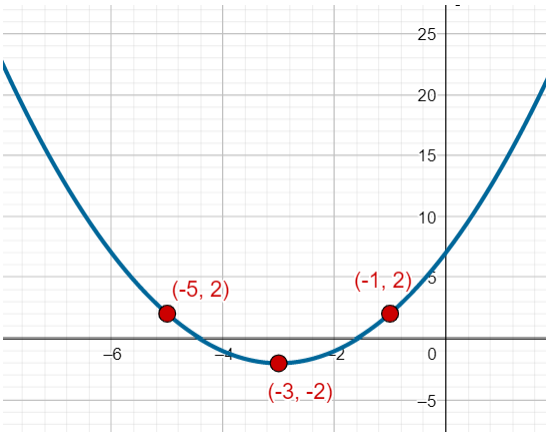
Write down the equation for each parabola.



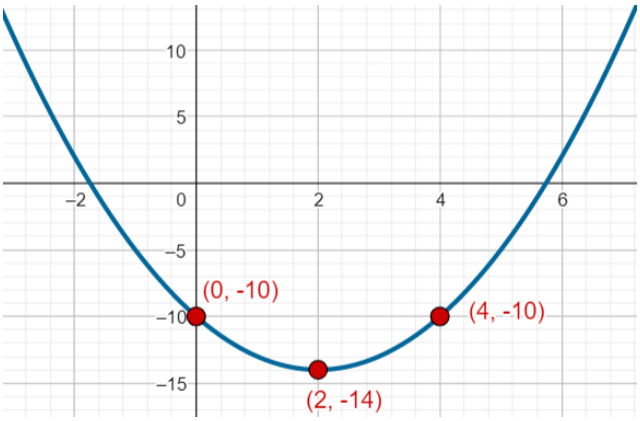
Equation:



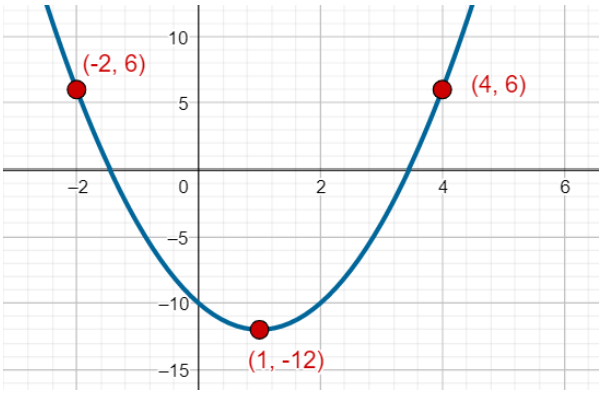
Equation:



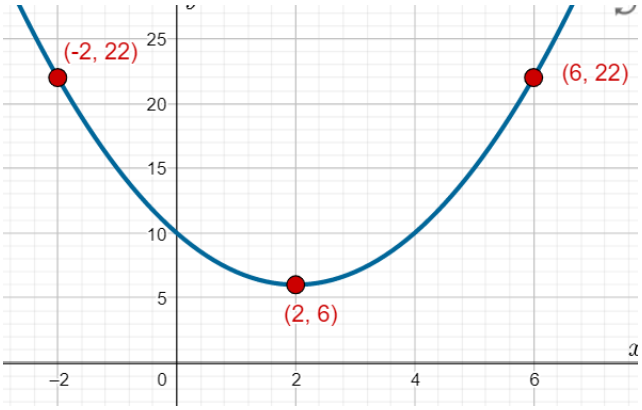
Equation:



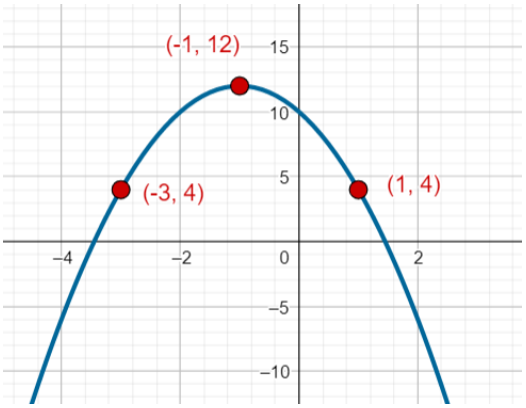
Equation:



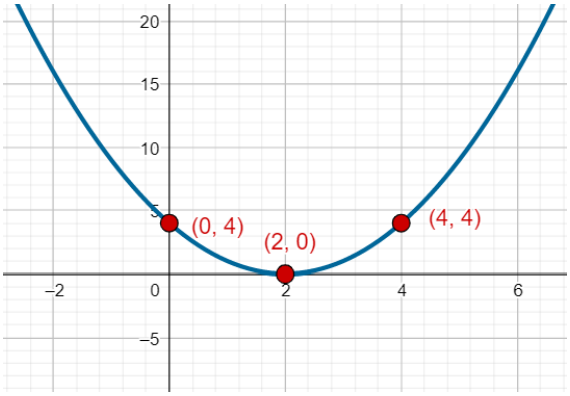
Equation:



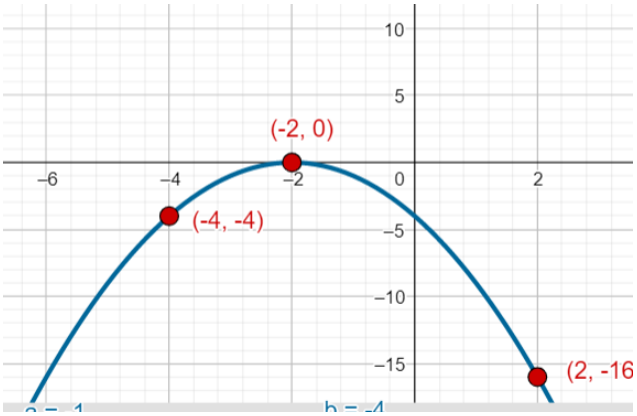
Equation:



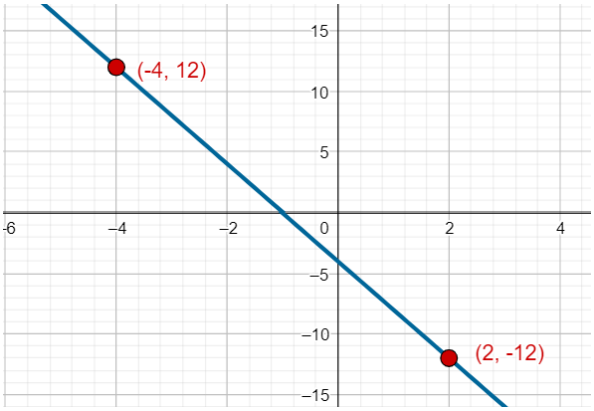
Equation:



Equation:



Equation:



Equation:

Generalisations:

What impact do the parameters a, b and c have on the position and shape of the parabola?